| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/KeyEvent.html) | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-files/index-1.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | --- | --- | | | ***Java™ Platform***  ***Standard Ed. 6*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [**PREV CLASS**](http://docs.google.com/java/awt/event/KeyAdapter.html)   [**NEXT CLASS**](http://docs.google.com/java/awt/event/KeyListener.html) | [**FRAMES**](http://docs.google.com/index.html?java/awt/event/KeyEvent.html)    [**NO FRAMES**](http://docs.google.com/KeyEvent.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#3znysh7) | [CONSTR](#4d34og8) | [METHOD](#2s8eyo1) | DETAIL: [FIELD](#1ksv4uv) | [CONSTR](#2i9l8ns) | [METHOD](#4gjguf0) |

## **java.awt.event**

Class KeyEvent

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 [java.util.EventObject](http://docs.google.com/java/util/EventObject.html)  
 [java.awt.AWTEvent](http://docs.google.com/java/awt/AWTEvent.html)  
 [java.awt.event.ComponentEvent](http://docs.google.com/java/awt/event/ComponentEvent.html)  
 [java.awt.event.InputEvent](http://docs.google.com/java/awt/event/InputEvent.html)  
 **java.awt.event.KeyEvent**

**All Implemented Interfaces:** [Serializable](http://docs.google.com/java/io/Serializable.html) **Direct Known Subclasses:** [MenuKeyEvent](http://docs.google.com/javax/swing/event/MenuKeyEvent.html)

public class **KeyEvent**extends [InputEvent](http://docs.google.com/java/awt/event/InputEvent.html)

An event which indicates that a keystroke occurred in a component.

This low-level event is generated by a component object (such as a text field) when a key is pressed, released, or typed. The event is passed to every KeyListener or KeyAdapter object which registered to receive such events using the component's addKeyListener method. (KeyAdapter objects implement the KeyListener interface.) Each such listener object gets this KeyEvent when the event occurs.

*"Key typed" events* are higher-level and generally do not depend on the platform or keyboard layout. They are generated when a Unicode character is entered, and are the preferred way to find out about character input. In the simplest case, a key typed event is produced by a single key press (e.g., 'a'). Often, however, characters are produced by series of key presses (e.g., 'shift' + 'a'), and the mapping from key pressed events to key typed events may be many-to-one or many-to-many. Key releases are not usually necessary to generate a key typed event, but there are some cases where the key typed event is not generated until a key is released (e.g., entering ASCII sequences via the Alt-Numpad method in Windows). No key typed events are generated for keys that don't generate Unicode characters (e.g., action keys, modifier keys, etc.).

The getKeyChar method always returns a valid Unicode character or CHAR\_UNDEFINED. Character input is reported by KEY\_TYPED events: KEY\_PRESSED and KEY\_RELEASED events are not necessarily associated with character input. Therefore, the result of the getKeyChar method is guaranteed to be meaningful only for KEY\_TYPED events.

For key pressed and key released events, the getKeyCode method returns the event's keyCode. For key typed events, the getKeyCode method always returns VK\_UNDEFINED.

*"Key pressed" and "key released" events* are lower-level and depend on the platform and keyboard layout. They are generated whenever a key is pressed or released, and are the only way to find out about keys that don't generate character input (e.g., action keys, modifier keys, etc.). The key being pressed or released is indicated by the getKeyCode method, which returns a virtual key code.

*Virtual key codes* are used to report which keyboard key has been pressed, rather than a character generated by the combination of one or more keystrokes (such as "A", which comes from shift and "a").

For example, pressing the Shift key will cause a KEY\_PRESSED event with a VK\_SHIFT keyCode, while pressing the 'a' key will result in a VK\_A keyCode. After the 'a' key is released, a KEY\_RELEASED event will be fired with VK\_A. Separately, a KEY\_TYPED event with a keyChar value of 'A' is generated.

Pressing and releasing a key on the keyboard results in the generating the following key events (in order):

KEY\_PRESSED  
 KEY\_TYPED (is only generated if a valid Unicode character could be generated.)  
 KEY\_RELEASED

But in some cases (e.g. auto-repeat or input method is activated) the order could be different (and platform dependent).

Notes:

* Key combinations which do not result in Unicode characters, such as action keys like F1 and the HELP key, do not generate KEY\_TYPED events.
* Not all keyboards or systems are capable of generating all virtual key codes. No attempt is made in Java to generate these keys artificially.
* Virtual key codes do not identify a physical key: they depend on the platform and keyboard layout. For example, the key that generates VK\_Q when using a U.S. keyboard layout will generate VK\_A when using a French keyboard layout.
* Not all characters have a keycode associated with them. For example, there is no keycode for the question mark because there is no keyboard for which it appears on the primary layer.
* In order to support the platform-independent handling of action keys, the Java platform uses a few additional virtual key constants for functions that would otherwise have to be recognized by interpreting virtual key codes and modifiers. For example, for Japanese Windows keyboards, VK\_ALL\_CANDIDATES is returned instead of VK\_CONVERT with the ALT modifier.
* As specified in [Focus Specification](http://docs.google.com/doc-files/FocusSpec.html) key events are dispatched to the focus owner by default.

WARNING: Aside from those keys that are defined by the Java language (VK\_ENTER, VK\_BACK\_SPACE, and VK\_TAB), do not rely on the values of the VK\_ constants. Sun reserves the right to change these values as needed to accomodate a wider range of keyboards in the future.

**Since:** 1.1 **See Also:**[KeyAdapter](http://docs.google.com/java/awt/event/KeyAdapter.html), [KeyListener](http://docs.google.com/java/awt/event/KeyListener.html), [Tutorial: Writing a Key Listener](http://java.sun.com/docs/books/tutorial/post1.0/ui/keylistener.html), [Serialized Form](http://docs.google.com/serialized-form.html#java.awt.event.KeyEvent)

| **Field Summary** | |
| --- | --- |
| static char | [**CHAR\_UNDEFINED**](http://docs.google.com/java/awt/event/KeyEvent.html#CHAR_UNDEFINED)            KEY\_PRESSED and KEY\_RELEASED events which do not map to a valid Unicode character use this for the keyChar value. |
| static int | [**KEY\_FIRST**](http://docs.google.com/java/awt/event/KeyEvent.html#KEY_FIRST)            The first number in the range of ids used for key events. |
| static int | [**KEY\_LAST**](http://docs.google.com/java/awt/event/KeyEvent.html#KEY_LAST)            The last number in the range of ids used for key events. |
| static int | [**KEY\_LOCATION\_LEFT**](http://docs.google.com/java/awt/event/KeyEvent.html#KEY_LOCATION_LEFT)            A constant indicating that the key pressed or released is in the left key location (there is more than one possible location for this key). |
| static int | [**KEY\_LOCATION\_NUMPAD**](http://docs.google.com/java/awt/event/KeyEvent.html#KEY_LOCATION_NUMPAD)            A constant indicating that the key event originated on the numeric keypad or with a virtual key corresponding to the numeric keypad. |
| static int | [**KEY\_LOCATION\_RIGHT**](http://docs.google.com/java/awt/event/KeyEvent.html#KEY_LOCATION_RIGHT)            A constant indicating that the key pressed or released is in the right key location (there is more than one possible location for this key). |
| static int | [**KEY\_LOCATION\_STANDARD**](http://docs.google.com/java/awt/event/KeyEvent.html#KEY_LOCATION_STANDARD)            A constant indicating that the key pressed or released is not distinguished as the left or right version of a key, and did not originate on the numeric keypad (or did not originate with a virtual key corresponding to the numeric keypad). |
| static int | [**KEY\_LOCATION\_UNKNOWN**](http://docs.google.com/java/awt/event/KeyEvent.html#KEY_LOCATION_UNKNOWN)            A constant indicating that the keyLocation is indeterminate or not relevant. |
| static int | [**KEY\_PRESSED**](http://docs.google.com/java/awt/event/KeyEvent.html#KEY_PRESSED)            The "key pressed" event. |
| static int | [**KEY\_RELEASED**](http://docs.google.com/java/awt/event/KeyEvent.html#KEY_RELEASED)            The "key released" event. |
| static int | [**KEY\_TYPED**](http://docs.google.com/java/awt/event/KeyEvent.html#KEY_TYPED)            The "key typed" event. |
| static int | [**VK\_0**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_0)            VK\_0 thru VK\_9 are the same as ASCII '0' thru '9' (0x30 - 0x39) |
| static int | [**VK\_1**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_1) |
| static int | [**VK\_2**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_2) |
| static int | [**VK\_3**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_3) |
| static int | [**VK\_4**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_4) |
| static int | [**VK\_5**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_5) |
| static int | [**VK\_6**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_6) |
| static int | [**VK\_7**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_7) |
| static int | [**VK\_8**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_8) |
| static int | [**VK\_9**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_9) |
| static int | [**VK\_A**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_A)            VK\_A thru VK\_Z are the same as ASCII 'A' thru 'Z' (0x41 - 0x5A) |
| static int | [**VK\_ACCEPT**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_ACCEPT)            Constant for the Accept or Commit function key. |
| static int | [**VK\_ADD**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_ADD) |
| static int | [**VK\_AGAIN**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_AGAIN) |
| static int | [**VK\_ALL\_CANDIDATES**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_ALL_CANDIDATES)            Constant for the All Candidates function key. |
| static int | [**VK\_ALPHANUMERIC**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_ALPHANUMERIC)            Constant for the Alphanumeric function key. |
| static int | [**VK\_ALT**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_ALT) |
| static int | [**VK\_ALT\_GRAPH**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_ALT_GRAPH)            Constant for the AltGraph function key. |
| static int | [**VK\_AMPERSAND**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_AMPERSAND) |
| static int | [**VK\_ASTERISK**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_ASTERISK) |
| static int | [**VK\_AT**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_AT)            Constant for the "@" key. |
| static int | [**VK\_B**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_B) |
| static int | [**VK\_BACK\_QUOTE**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_BACK_QUOTE) |
| static int | [**VK\_BACK\_SLASH**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_BACK_SLASH)            Constant for the back slash key, "\" |
| static int | [**VK\_BACK\_SPACE**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_BACK_SPACE) |
| static int | [**VK\_BEGIN**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_BEGIN)            Constant for the Begin key. |
| static int | [**VK\_BRACELEFT**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_BRACELEFT) |
| static int | [**VK\_BRACERIGHT**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_BRACERIGHT) |
| static int | [**VK\_C**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_C) |
| static int | [**VK\_CANCEL**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_CANCEL) |
| static int | [**VK\_CAPS\_LOCK**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_CAPS_LOCK) |
| static int | [**VK\_CIRCUMFLEX**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_CIRCUMFLEX)            Constant for the "^" key. |
| static int | [**VK\_CLEAR**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_CLEAR) |
| static int | [**VK\_CLOSE\_BRACKET**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_CLOSE_BRACKET)            Constant for the close bracket key, "]" |
| static int | [**VK\_CODE\_INPUT**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_CODE_INPUT)            Constant for the Code Input function key. |
| static int | [**VK\_COLON**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_COLON)            Constant for the ":" key. |
| static int | [**VK\_COMMA**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_COMMA)            Constant for the comma key, "," |
| static int | [**VK\_COMPOSE**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_COMPOSE)            Constant for the Compose function key. |
| static int | [**VK\_CONTEXT\_MENU**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_CONTEXT_MENU)            Constant for the Microsoft Windows Context Menu key. |
| static int | [**VK\_CONTROL**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_CONTROL) |
| static int | [**VK\_CONVERT**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_CONVERT)            Constant for the Convert function key. |
| static int | [**VK\_COPY**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_COPY) |
| static int | [**VK\_CUT**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_CUT) |
| static int | [**VK\_D**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_D) |
| static int | [**VK\_DEAD\_ABOVEDOT**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_DEAD_ABOVEDOT) |
| static int | [**VK\_DEAD\_ABOVERING**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_DEAD_ABOVERING) |
| static int | [**VK\_DEAD\_ACUTE**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_DEAD_ACUTE) |
| static int | [**VK\_DEAD\_BREVE**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_DEAD_BREVE) |
| static int | [**VK\_DEAD\_CARON**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_DEAD_CARON) |
| static int | [**VK\_DEAD\_CEDILLA**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_DEAD_CEDILLA) |
| static int | [**VK\_DEAD\_CIRCUMFLEX**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_DEAD_CIRCUMFLEX) |
| static int | [**VK\_DEAD\_DIAERESIS**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_DEAD_DIAERESIS) |
| static int | [**VK\_DEAD\_DOUBLEACUTE**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_DEAD_DOUBLEACUTE) |
| static int | [**VK\_DEAD\_GRAVE**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_DEAD_GRAVE) |
| static int | [**VK\_DEAD\_IOTA**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_DEAD_IOTA) |
| static int | [**VK\_DEAD\_MACRON**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_DEAD_MACRON) |
| static int | [**VK\_DEAD\_OGONEK**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_DEAD_OGONEK) |
| static int | [**VK\_DEAD\_SEMIVOICED\_SOUND**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_DEAD_SEMIVOICED_SOUND) |
| static int | [**VK\_DEAD\_TILDE**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_DEAD_TILDE) |
| static int | [**VK\_DEAD\_VOICED\_SOUND**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_DEAD_VOICED_SOUND) |
| static int | [**VK\_DECIMAL**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_DECIMAL) |
| static int | [**VK\_DELETE**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_DELETE) |
| static int | [**VK\_DIVIDE**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_DIVIDE) |
| static int | [**VK\_DOLLAR**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_DOLLAR)            Constant for the "$" key. |
| static int | [**VK\_DOWN**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_DOWN)            Constant for the non-numpad **down** arrow key. |
| static int | [**VK\_E**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_E) |
| static int | [**VK\_END**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_END) |
| static int | [**VK\_ENTER**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_ENTER) |
| static int | [**VK\_EQUALS**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_EQUALS)            Constant for the equals key, "=" |
| static int | [**VK\_ESCAPE**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_ESCAPE) |
| static int | [**VK\_EURO\_SIGN**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_EURO_SIGN)            Constant for the Euro currency sign key. |
| static int | [**VK\_EXCLAMATION\_MARK**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_EXCLAMATION_MARK)            Constant for the "!" key. |
| static int | [**VK\_F**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_F) |
| static int | [**VK\_F1**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_F1)            Constant for the F1 function key. |
| static int | [**VK\_F10**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_F10)            Constant for the F10 function key. |
| static int | [**VK\_F11**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_F11)            Constant for the F11 function key. |
| static int | [**VK\_F12**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_F12)            Constant for the F12 function key. |
| static int | [**VK\_F13**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_F13)            Constant for the F13 function key. |
| static int | [**VK\_F14**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_F14)            Constant for the F14 function key. |
| static int | [**VK\_F15**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_F15)            Constant for the F15 function key. |
| static int | [**VK\_F16**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_F16)            Constant for the F16 function key. |
| static int | [**VK\_F17**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_F17)            Constant for the F17 function key. |
| static int | [**VK\_F18**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_F18)            Constant for the F18 function key. |
| static int | [**VK\_F19**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_F19)            Constant for the F19 function key. |
| static int | [**VK\_F2**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_F2)            Constant for the F2 function key. |
| static int | [**VK\_F20**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_F20)            Constant for the F20 function key. |
| static int | [**VK\_F21**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_F21)            Constant for the F21 function key. |
| static int | [**VK\_F22**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_F22)            Constant for the F22 function key. |
| static int | [**VK\_F23**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_F23)            Constant for the F23 function key. |
| static int | [**VK\_F24**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_F24)            Constant for the F24 function key. |
| static int | [**VK\_F3**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_F3)            Constant for the F3 function key. |
| static int | [**VK\_F4**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_F4)            Constant for the F4 function key. |
| static int | [**VK\_F5**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_F5)            Constant for the F5 function key. |
| static int | [**VK\_F6**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_F6)            Constant for the F6 function key. |
| static int | [**VK\_F7**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_F7)            Constant for the F7 function key. |
| static int | [**VK\_F8**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_F8)            Constant for the F8 function key. |
| static int | [**VK\_F9**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_F9)            Constant for the F9 function key. |
| static int | [**VK\_FINAL**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_FINAL) |
| static int | [**VK\_FIND**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_FIND) |
| static int | [**VK\_FULL\_WIDTH**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_FULL_WIDTH)            Constant for the Full-Width Characters function key. |
| static int | [**VK\_G**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_G) |
| static int | [**VK\_GREATER**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_GREATER) |
| static int | [**VK\_H**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_H) |
| static int | [**VK\_HALF\_WIDTH**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_HALF_WIDTH)            Constant for the Half-Width Characters function key. |
| static int | [**VK\_HELP**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_HELP) |
| static int | [**VK\_HIRAGANA**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_HIRAGANA)            Constant for the Hiragana function key. |
| static int | [**VK\_HOME**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_HOME) |
| static int | [**VK\_I**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_I) |
| static int | [**VK\_INPUT\_METHOD\_ON\_OFF**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_INPUT_METHOD_ON_OFF)            Constant for the input method on/off key. |
| static int | [**VK\_INSERT**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_INSERT) |
| static int | [**VK\_INVERTED\_EXCLAMATION\_MARK**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_INVERTED_EXCLAMATION_MARK)            Constant for the inverted exclamation mark key. |
| static int | [**VK\_J**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_J) |
| static int | [**VK\_JAPANESE\_HIRAGANA**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_JAPANESE_HIRAGANA)            Constant for the Japanese-Hiragana function key. |
| static int | [**VK\_JAPANESE\_KATAKANA**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_JAPANESE_KATAKANA)            Constant for the Japanese-Katakana function key. |
| static int | [**VK\_JAPANESE\_ROMAN**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_JAPANESE_ROMAN)            Constant for the Japanese-Roman function key. |
| static int | [**VK\_K**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_K) |
| static int | [**VK\_KANA**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_KANA) |
| static int | [**VK\_KANA\_LOCK**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_KANA_LOCK)            Constant for the locking Kana function key. |
| static int | [**VK\_KANJI**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_KANJI) |
| static int | [**VK\_KATAKANA**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_KATAKANA)            Constant for the Katakana function key. |
| static int | [**VK\_KP\_DOWN**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_KP_DOWN)            Constant for the numeric keypad **down** arrow key. |
| static int | [**VK\_KP\_LEFT**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_KP_LEFT)            Constant for the numeric keypad **left** arrow key. |
| static int | [**VK\_KP\_RIGHT**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_KP_RIGHT)            Constant for the numeric keypad **right** arrow key. |
| static int | [**VK\_KP\_UP**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_KP_UP)            Constant for the numeric keypad **up** arrow key. |
| static int | [**VK\_L**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_L) |
| static int | [**VK\_LEFT**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_LEFT)            Constant for the non-numpad **left** arrow key. |
| static int | [**VK\_LEFT\_PARENTHESIS**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_LEFT_PARENTHESIS)            Constant for the "(" key. |
| static int | [**VK\_LESS**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_LESS) |
| static int | [**VK\_M**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_M) |
| static int | [**VK\_META**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_META) |
| static int | [**VK\_MINUS**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_MINUS)            Constant for the minus key, "-" |
| static int | [**VK\_MODECHANGE**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_MODECHANGE) |
| static int | [**VK\_MULTIPLY**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_MULTIPLY) |
| static int | [**VK\_N**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_N) |
| static int | [**VK\_NONCONVERT**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_NONCONVERT)            Constant for the Don't Convert function key. |
| static int | [**VK\_NUM\_LOCK**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_NUM_LOCK) |
| static int | [**VK\_NUMBER\_SIGN**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_NUMBER_SIGN)            Constant for the "#" key. |
| static int | [**VK\_NUMPAD0**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_NUMPAD0) |
| static int | [**VK\_NUMPAD1**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_NUMPAD1) |
| static int | [**VK\_NUMPAD2**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_NUMPAD2) |
| static int | [**VK\_NUMPAD3**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_NUMPAD3) |
| static int | [**VK\_NUMPAD4**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_NUMPAD4) |
| static int | [**VK\_NUMPAD5**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_NUMPAD5) |
| static int | [**VK\_NUMPAD6**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_NUMPAD6) |
| static int | [**VK\_NUMPAD7**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_NUMPAD7) |
| static int | [**VK\_NUMPAD8**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_NUMPAD8) |
| static int | [**VK\_NUMPAD9**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_NUMPAD9) |
| static int | [**VK\_O**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_O) |
| static int | [**VK\_OPEN\_BRACKET**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_OPEN_BRACKET)            Constant for the open bracket key, "[" |
| static int | [**VK\_P**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_P) |
| static int | [**VK\_PAGE\_DOWN**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_PAGE_DOWN) |
| static int | [**VK\_PAGE\_UP**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_PAGE_UP) |
| static int | [**VK\_PASTE**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_PASTE) |
| static int | [**VK\_PAUSE**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_PAUSE) |
| static int | [**VK\_PERIOD**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_PERIOD)            Constant for the period key, "." |
| static int | [**VK\_PLUS**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_PLUS)            Constant for the "+" key. |
| static int | [**VK\_PREVIOUS\_CANDIDATE**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_PREVIOUS_CANDIDATE)            Constant for the Previous Candidate function key. |
| static int | [**VK\_PRINTSCREEN**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_PRINTSCREEN) |
| static int | [**VK\_PROPS**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_PROPS) |
| static int | [**VK\_Q**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_Q) |
| static int | [**VK\_QUOTE**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_QUOTE) |
| static int | [**VK\_QUOTEDBL**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_QUOTEDBL) |
| static int | [**VK\_R**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_R) |
| static int | [**VK\_RIGHT**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_RIGHT)            Constant for the non-numpad **right** arrow key. |
| static int | [**VK\_RIGHT\_PARENTHESIS**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_RIGHT_PARENTHESIS)            Constant for the ")" key. |
| static int | [**VK\_ROMAN\_CHARACTERS**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_ROMAN_CHARACTERS)            Constant for the Roman Characters function key. |
| static int | [**VK\_S**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_S) |
| static int | [**VK\_SCROLL\_LOCK**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_SCROLL_LOCK) |
| static int | [**VK\_SEMICOLON**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_SEMICOLON)            Constant for the semicolon key, ";" |
| static int | [**VK\_SEPARATER**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_SEPARATER)            This constant is obsolete, and is included only for backwards compatibility. |
| static int | [**VK\_SEPARATOR**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_SEPARATOR)            Constant for the Numpad Separator key. |
| static int | [**VK\_SHIFT**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_SHIFT) |
| static int | [**VK\_SLASH**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_SLASH)            Constant for the forward slash key, "/" |
| static int | [**VK\_SPACE**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_SPACE) |
| static int | [**VK\_STOP**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_STOP) |
| static int | [**VK\_SUBTRACT**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_SUBTRACT) |
| static int | [**VK\_T**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_T) |
| static int | [**VK\_TAB**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_TAB) |
| static int | [**VK\_U**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_U) |
| static int | [**VK\_UNDEFINED**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_UNDEFINED)            This value is used to indicate that the keyCode is unknown. |
| static int | [**VK\_UNDERSCORE**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_UNDERSCORE)            Constant for the "\_" key. |
| static int | [**VK\_UNDO**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_UNDO) |
| static int | [**VK\_UP**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_UP)            Constant for the non-numpad **up** arrow key. |
| static int | [**VK\_V**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_V) |
| static int | [**VK\_W**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_W) |
| static int | [**VK\_WINDOWS**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_WINDOWS)            Constant for the Microsoft Windows "Windows" key. |
| static int | [**VK\_X**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_X) |
| static int | [**VK\_Y**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_Y) |
| static int | [**VK\_Z**](http://docs.google.com/java/awt/event/KeyEvent.html#VK_Z) |

| **Fields inherited from class java.awt.event.**[**InputEvent**](http://docs.google.com/java/awt/event/InputEvent.html) |
| --- |
| [ALT\_DOWN\_MASK](http://docs.google.com/java/awt/event/InputEvent.html#ALT_DOWN_MASK), [ALT\_GRAPH\_DOWN\_MASK](http://docs.google.com/java/awt/event/InputEvent.html#ALT_GRAPH_DOWN_MASK), [ALT\_GRAPH\_MASK](http://docs.google.com/java/awt/event/InputEvent.html#ALT_GRAPH_MASK), [ALT\_MASK](http://docs.google.com/java/awt/event/InputEvent.html#ALT_MASK), [BUTTON1\_DOWN\_MASK](http://docs.google.com/java/awt/event/InputEvent.html#BUTTON1_DOWN_MASK), [BUTTON1\_MASK](http://docs.google.com/java/awt/event/InputEvent.html#BUTTON1_MASK), [BUTTON2\_DOWN\_MASK](http://docs.google.com/java/awt/event/InputEvent.html#BUTTON2_DOWN_MASK), [BUTTON2\_MASK](http://docs.google.com/java/awt/event/InputEvent.html#BUTTON2_MASK), [BUTTON3\_DOWN\_MASK](http://docs.google.com/java/awt/event/InputEvent.html#BUTTON3_DOWN_MASK), [BUTTON3\_MASK](http://docs.google.com/java/awt/event/InputEvent.html#BUTTON3_MASK), [CTRL\_DOWN\_MASK](http://docs.google.com/java/awt/event/InputEvent.html#CTRL_DOWN_MASK), [CTRL\_MASK](http://docs.google.com/java/awt/event/InputEvent.html#CTRL_MASK), [META\_DOWN\_MASK](http://docs.google.com/java/awt/event/InputEvent.html#META_DOWN_MASK), [META\_MASK](http://docs.google.com/java/awt/event/InputEvent.html#META_MASK), [SHIFT\_DOWN\_MASK](http://docs.google.com/java/awt/event/InputEvent.html#SHIFT_DOWN_MASK), [SHIFT\_MASK](http://docs.google.com/java/awt/event/InputEvent.html#SHIFT_MASK) |

| **Fields inherited from class java.awt.event.**[**ComponentEvent**](http://docs.google.com/java/awt/event/ComponentEvent.html) |
| --- |
| [COMPONENT\_FIRST](http://docs.google.com/java/awt/event/ComponentEvent.html#COMPONENT_FIRST), [COMPONENT\_HIDDEN](http://docs.google.com/java/awt/event/ComponentEvent.html#COMPONENT_HIDDEN), [COMPONENT\_LAST](http://docs.google.com/java/awt/event/ComponentEvent.html#COMPONENT_LAST), [COMPONENT\_MOVED](http://docs.google.com/java/awt/event/ComponentEvent.html#COMPONENT_MOVED), [COMPONENT\_RESIZED](http://docs.google.com/java/awt/event/ComponentEvent.html#COMPONENT_RESIZED), [COMPONENT\_SHOWN](http://docs.google.com/java/awt/event/ComponentEvent.html#COMPONENT_SHOWN) |

| **Fields inherited from class java.awt.**[**AWTEvent**](http://docs.google.com/java/awt/AWTEvent.html) |
| --- |
| [ACTION\_EVENT\_MASK](http://docs.google.com/java/awt/AWTEvent.html#ACTION_EVENT_MASK), [ADJUSTMENT\_EVENT\_MASK](http://docs.google.com/java/awt/AWTEvent.html#ADJUSTMENT_EVENT_MASK), [COMPONENT\_EVENT\_MASK](http://docs.google.com/java/awt/AWTEvent.html#COMPONENT_EVENT_MASK), [consumed](http://docs.google.com/java/awt/AWTEvent.html#consumed), [CONTAINER\_EVENT\_MASK](http://docs.google.com/java/awt/AWTEvent.html#CONTAINER_EVENT_MASK), [FOCUS\_EVENT\_MASK](http://docs.google.com/java/awt/AWTEvent.html#FOCUS_EVENT_MASK), [HIERARCHY\_BOUNDS\_EVENT\_MASK](http://docs.google.com/java/awt/AWTEvent.html#HIERARCHY_BOUNDS_EVENT_MASK), [HIERARCHY\_EVENT\_MASK](http://docs.google.com/java/awt/AWTEvent.html#HIERARCHY_EVENT_MASK), [id](http://docs.google.com/java/awt/AWTEvent.html#id), [INPUT\_METHOD\_EVENT\_MASK](http://docs.google.com/java/awt/AWTEvent.html#INPUT_METHOD_EVENT_MASK), [INVOCATION\_EVENT\_MASK](http://docs.google.com/java/awt/AWTEvent.html#INVOCATION_EVENT_MASK), [ITEM\_EVENT\_MASK](http://docs.google.com/java/awt/AWTEvent.html#ITEM_EVENT_MASK), [KEY\_EVENT\_MASK](http://docs.google.com/java/awt/AWTEvent.html#KEY_EVENT_MASK), [MOUSE\_EVENT\_MASK](http://docs.google.com/java/awt/AWTEvent.html#MOUSE_EVENT_MASK), [MOUSE\_MOTION\_EVENT\_MASK](http://docs.google.com/java/awt/AWTEvent.html#MOUSE_MOTION_EVENT_MASK), [MOUSE\_WHEEL\_EVENT\_MASK](http://docs.google.com/java/awt/AWTEvent.html#MOUSE_WHEEL_EVENT_MASK), [PAINT\_EVENT\_MASK](http://docs.google.com/java/awt/AWTEvent.html#PAINT_EVENT_MASK), [RESERVED\_ID\_MAX](http://docs.google.com/java/awt/AWTEvent.html#RESERVED_ID_MAX), [TEXT\_EVENT\_MASK](http://docs.google.com/java/awt/AWTEvent.html#TEXT_EVENT_MASK), [WINDOW\_EVENT\_MASK](http://docs.google.com/java/awt/AWTEvent.html#WINDOW_EVENT_MASK), [WINDOW\_FOCUS\_EVENT\_MASK](http://docs.google.com/java/awt/AWTEvent.html#WINDOW_FOCUS_EVENT_MASK), [WINDOW\_STATE\_EVENT\_MASK](http://docs.google.com/java/awt/AWTEvent.html#WINDOW_STATE_EVENT_MASK) |

| **Fields inherited from class java.util.**[**EventObject**](http://docs.google.com/java/util/EventObject.html) |
| --- |
| [source](http://docs.google.com/java/util/EventObject.html#source) |

| **Constructor Summary** | |
| --- | --- |
| [**KeyEvent**](http://docs.google.com/java/awt/event/KeyEvent.html#KeyEvent(java.awt.Component,%20int,%20long,%20int,%20int))([Component](http://docs.google.com/java/awt/Component.html) source, int id, long when, int modifiers, int keyCode)  **Deprecated.** *as of JDK1.1* |
| [**KeyEvent**](http://docs.google.com/java/awt/event/KeyEvent.html#KeyEvent(java.awt.Component,%20int,%20long,%20int,%20int,%20char))([Component](http://docs.google.com/java/awt/Component.html) source, int id, long when, int modifiers, int keyCode, char keyChar)            Constructs a KeyEvent object. |
| [**KeyEvent**](http://docs.google.com/java/awt/event/KeyEvent.html#KeyEvent(java.awt.Component,%20int,%20long,%20int,%20int,%20char,%20int))([Component](http://docs.google.com/java/awt/Component.html) source, int id, long when, int modifiers, int keyCode, char keyChar, int keyLocation) |

| **Method Summary** | |
| --- | --- |
| char | [**getKeyChar**](http://docs.google.com/java/awt/event/KeyEvent.html#getKeyChar())()            Returns the character associated with the key in this event. |
| int | [**getKeyCode**](http://docs.google.com/java/awt/event/KeyEvent.html#getKeyCode())()            Returns the integer keyCode associated with the key in this event. |
| int | [**getKeyLocation**](http://docs.google.com/java/awt/event/KeyEvent.html#getKeyLocation())()            Returns the location of the key that originated this key event. |
| static [String](http://docs.google.com/java/lang/String.html) | [**getKeyModifiersText**](http://docs.google.com/java/awt/event/KeyEvent.html#getKeyModifiersText(int))(int modifiers)            Returns a String describing the modifier key(s), such as "Shift", or "Ctrl+Shift". |
| static [String](http://docs.google.com/java/lang/String.html) | [**getKeyText**](http://docs.google.com/java/awt/event/KeyEvent.html#getKeyText(int))(int keyCode)            Returns a String describing the keyCode, such as "HOME", "F1" or "A". |
| boolean | [**isActionKey**](http://docs.google.com/java/awt/event/KeyEvent.html#isActionKey())()            Returns whether the key in this event is an "action" key. |
| [String](http://docs.google.com/java/lang/String.html) | [**paramString**](http://docs.google.com/java/awt/event/KeyEvent.html#paramString())()            Returns a parameter string identifying this event. |
| void | [**setKeyChar**](http://docs.google.com/java/awt/event/KeyEvent.html#setKeyChar(char))(char keyChar)            Set the keyChar value to indicate a logical character. |
| void | [**setKeyCode**](http://docs.google.com/java/awt/event/KeyEvent.html#setKeyCode(int))(int keyCode)            Set the keyCode value to indicate a physical key. |
| void | [**setModifiers**](http://docs.google.com/java/awt/event/KeyEvent.html#setModifiers(int))(int modifiers)  **Deprecated.** *as of JDK1.1.4* |

| **Methods inherited from class java.awt.event.**[**InputEvent**](http://docs.google.com/java/awt/event/InputEvent.html) |
| --- |
| [consume](http://docs.google.com/java/awt/event/InputEvent.html#consume()), [getModifiers](http://docs.google.com/java/awt/event/InputEvent.html#getModifiers()), [getModifiersEx](http://docs.google.com/java/awt/event/InputEvent.html#getModifiersEx()), [getModifiersExText](http://docs.google.com/java/awt/event/InputEvent.html#getModifiersExText(int)), [getWhen](http://docs.google.com/java/awt/event/InputEvent.html#getWhen()), [isAltDown](http://docs.google.com/java/awt/event/InputEvent.html#isAltDown()), [isAltGraphDown](http://docs.google.com/java/awt/event/InputEvent.html#isAltGraphDown()), [isConsumed](http://docs.google.com/java/awt/event/InputEvent.html#isConsumed()), [isControlDown](http://docs.google.com/java/awt/event/InputEvent.html#isControlDown()), [isMetaDown](http://docs.google.com/java/awt/event/InputEvent.html#isMetaDown()), [isShiftDown](http://docs.google.com/java/awt/event/InputEvent.html#isShiftDown()) |

| **Methods inherited from class java.awt.event.**[**ComponentEvent**](http://docs.google.com/java/awt/event/ComponentEvent.html) |
| --- |
| [getComponent](http://docs.google.com/java/awt/event/ComponentEvent.html#getComponent()) |

| **Methods inherited from class java.awt.**[**AWTEvent**](http://docs.google.com/java/awt/AWTEvent.html) |
| --- |
| [getID](http://docs.google.com/java/awt/AWTEvent.html#getID()), [setSource](http://docs.google.com/java/awt/AWTEvent.html#setSource(java.lang.Object)), [toString](http://docs.google.com/java/awt/AWTEvent.html#toString()) |

| **Methods inherited from class java.util.**[**EventObject**](http://docs.google.com/java/util/EventObject.html) |
| --- |
| [getSource](http://docs.google.com/java/util/EventObject.html#getSource()) |

| **Methods inherited from class java.lang.**[**Object**](http://docs.google.com/java/lang/Object.html) |
| --- |
| [clone](http://docs.google.com/java/lang/Object.html#clone()), [equals](http://docs.google.com/java/lang/Object.html#equals(java.lang.Object)), [finalize](http://docs.google.com/java/lang/Object.html#finalize()), [getClass](http://docs.google.com/java/lang/Object.html#getClass()), [hashCode](http://docs.google.com/java/lang/Object.html#hashCode()), [notify](http://docs.google.com/java/lang/Object.html#notify()), [notifyAll](http://docs.google.com/java/lang/Object.html#notifyAll()), [wait](http://docs.google.com/java/lang/Object.html#wait()), [wait](http://docs.google.com/java/lang/Object.html#wait(long)), [wait](http://docs.google.com/java/lang/Object.html#wait(long,%20int)) |

| **Field Detail** |
| --- |

### KEY\_FIRST

public static final int **KEY\_FIRST**

The first number in the range of ids used for key events.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.KEY_FIRST)

### KEY\_LAST

public static final int **KEY\_LAST**

The last number in the range of ids used for key events.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.KEY_LAST)

### KEY\_TYPED

public static final int **KEY\_TYPED**

The "key typed" event. This event is generated when a character is entered. In the simplest case, it is produced by a single key press. Often, however, characters are produced by series of key presses, and the mapping from key pressed events to key typed events may be many-to-one or many-to-many.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.KEY_TYPED)

### KEY\_PRESSED

public static final int **KEY\_PRESSED**

The "key pressed" event. This event is generated when a key is pushed down.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.KEY_PRESSED)

### KEY\_RELEASED

public static final int **KEY\_RELEASED**

The "key released" event. This event is generated when a key is let up.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.KEY_RELEASED)

### VK\_ENTER

public static final int **VK\_ENTER**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_ENTER)

### VK\_BACK\_SPACE

public static final int **VK\_BACK\_SPACE**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_BACK_SPACE)

### VK\_TAB

public static final int **VK\_TAB**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_TAB)

### VK\_CANCEL

public static final int **VK\_CANCEL**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_CANCEL)

### VK\_CLEAR

public static final int **VK\_CLEAR**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_CLEAR)

### VK\_SHIFT

public static final int **VK\_SHIFT**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_SHIFT)

### VK\_CONTROL

public static final int **VK\_CONTROL**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_CONTROL)

### VK\_ALT

public static final int **VK\_ALT**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_ALT)

### VK\_PAUSE

public static final int **VK\_PAUSE**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_PAUSE)

### VK\_CAPS\_LOCK

public static final int **VK\_CAPS\_LOCK**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_CAPS_LOCK)

### VK\_ESCAPE

public static final int **VK\_ESCAPE**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_ESCAPE)

### VK\_SPACE

public static final int **VK\_SPACE**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_SPACE)

### VK\_PAGE\_UP

public static final int **VK\_PAGE\_UP**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_PAGE_UP)

### VK\_PAGE\_DOWN

public static final int **VK\_PAGE\_DOWN**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_PAGE_DOWN)

### VK\_END

public static final int **VK\_END**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_END)

### VK\_HOME

public static final int **VK\_HOME**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_HOME)

### VK\_LEFT

public static final int **VK\_LEFT**

Constant for the non-numpad **left** arrow key.

**See Also:**[VK\_KP\_LEFT](http://docs.google.com/java/awt/event/KeyEvent.html#VK_KP_LEFT), [Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_LEFT)

### VK\_UP

public static final int **VK\_UP**

Constant for the non-numpad **up** arrow key.

**See Also:**[VK\_KP\_UP](http://docs.google.com/java/awt/event/KeyEvent.html#VK_KP_UP), [Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_UP)

### VK\_RIGHT

public static final int **VK\_RIGHT**

Constant for the non-numpad **right** arrow key.

**See Also:**[VK\_KP\_RIGHT](http://docs.google.com/java/awt/event/KeyEvent.html#VK_KP_RIGHT), [Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_RIGHT)

### VK\_DOWN

public static final int **VK\_DOWN**

Constant for the non-numpad **down** arrow key.

**See Also:**[VK\_KP\_DOWN](http://docs.google.com/java/awt/event/KeyEvent.html#VK_KP_DOWN), [Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_DOWN)

### VK\_COMMA

public static final int **VK\_COMMA**

Constant for the comma key, ","

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_COMMA)

### VK\_MINUS

public static final int **VK\_MINUS**

Constant for the minus key, "-"

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_MINUS)

### VK\_PERIOD

public static final int **VK\_PERIOD**

Constant for the period key, "."

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_PERIOD)

### VK\_SLASH

public static final int **VK\_SLASH**

Constant for the forward slash key, "/"

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_SLASH)

### VK\_0

public static final int **VK\_0**

VK\_0 thru VK\_9 are the same as ASCII '0' thru '9' (0x30 - 0x39)

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_0)

### VK\_1

public static final int **VK\_1**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_1)

### VK\_2

public static final int **VK\_2**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_2)

### VK\_3

public static final int **VK\_3**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_3)

### VK\_4

public static final int **VK\_4**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_4)

### VK\_5

public static final int **VK\_5**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_5)

### VK\_6

public static final int **VK\_6**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_6)

### VK\_7

public static final int **VK\_7**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_7)

### VK\_8

public static final int **VK\_8**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_8)

### VK\_9

public static final int **VK\_9**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_9)

### VK\_SEMICOLON

public static final int **VK\_SEMICOLON**

Constant for the semicolon key, ";"

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_SEMICOLON)

### VK\_EQUALS

public static final int **VK\_EQUALS**

Constant for the equals key, "="

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_EQUALS)

### VK\_A

public static final int **VK\_A**

VK\_A thru VK\_Z are the same as ASCII 'A' thru 'Z' (0x41 - 0x5A)

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_A)

### VK\_B

public static final int **VK\_B**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_B)

### VK\_C

public static final int **VK\_C**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_C)

### VK\_D

public static final int **VK\_D**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_D)

### VK\_E

public static final int **VK\_E**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_E)

### VK\_F

public static final int **VK\_F**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_F)

### VK\_G

public static final int **VK\_G**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_G)

### VK\_H

public static final int **VK\_H**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_H)

### VK\_I

public static final int **VK\_I**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_I)

### VK\_J

public static final int **VK\_J**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_J)

### VK\_K

public static final int **VK\_K**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_K)

### VK\_L

public static final int **VK\_L**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_L)

### VK\_M

public static final int **VK\_M**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_M)

### VK\_N

public static final int **VK\_N**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_N)

### VK\_O

public static final int **VK\_O**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_O)

### VK\_P

public static final int **VK\_P**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_P)

### VK\_Q

public static final int **VK\_Q**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_Q)

### VK\_R

public static final int **VK\_R**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_R)

### VK\_S

public static final int **VK\_S**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_S)

### VK\_T

public static final int **VK\_T**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_T)

### VK\_U

public static final int **VK\_U**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_U)

### VK\_V

public static final int **VK\_V**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_V)

### VK\_W

public static final int **VK\_W**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_W)

### VK\_X

public static final int **VK\_X**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_X)

### VK\_Y

public static final int **VK\_Y**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_Y)

### VK\_Z

public static final int **VK\_Z**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_Z)

### VK\_OPEN\_BRACKET

public static final int **VK\_OPEN\_BRACKET**

Constant for the open bracket key, "["

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_OPEN_BRACKET)

### VK\_BACK\_SLASH

public static final int **VK\_BACK\_SLASH**

Constant for the back slash key, "\"

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_BACK_SLASH)

### VK\_CLOSE\_BRACKET

public static final int **VK\_CLOSE\_BRACKET**

Constant for the close bracket key, "]"

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_CLOSE_BRACKET)

### VK\_NUMPAD0

public static final int **VK\_NUMPAD0**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_NUMPAD0)

### VK\_NUMPAD1

public static final int **VK\_NUMPAD1**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_NUMPAD1)

### VK\_NUMPAD2

public static final int **VK\_NUMPAD2**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_NUMPAD2)

### VK\_NUMPAD3

public static final int **VK\_NUMPAD3**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_NUMPAD3)

### VK\_NUMPAD4

public static final int **VK\_NUMPAD4**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_NUMPAD4)

### VK\_NUMPAD5

public static final int **VK\_NUMPAD5**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_NUMPAD5)

### VK\_NUMPAD6

public static final int **VK\_NUMPAD6**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_NUMPAD6)

### VK\_NUMPAD7

public static final int **VK\_NUMPAD7**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_NUMPAD7)

### VK\_NUMPAD8

public static final int **VK\_NUMPAD8**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_NUMPAD8)

### VK\_NUMPAD9

public static final int **VK\_NUMPAD9**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_NUMPAD9)

### VK\_MULTIPLY

public static final int **VK\_MULTIPLY**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_MULTIPLY)

### VK\_ADD

public static final int **VK\_ADD**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_ADD)

### VK\_SEPARATER

public static final int **VK\_SEPARATER**

This constant is obsolete, and is included only for backwards compatibility.

**See Also:**[VK\_SEPARATOR](http://docs.google.com/java/awt/event/KeyEvent.html#VK_SEPARATOR), [Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_SEPARATER)

### VK\_SEPARATOR

public static final int **VK\_SEPARATOR**

Constant for the Numpad Separator key.

**Since:** 1.4 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_SEPARATOR)

### VK\_SUBTRACT

public static final int **VK\_SUBTRACT**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_SUBTRACT)

### VK\_DECIMAL

public static final int **VK\_DECIMAL**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_DECIMAL)

### VK\_DIVIDE

public static final int **VK\_DIVIDE**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_DIVIDE)

### VK\_DELETE

public static final int **VK\_DELETE**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_DELETE)

### VK\_NUM\_LOCK

public static final int **VK\_NUM\_LOCK**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_NUM_LOCK)

### VK\_SCROLL\_LOCK

public static final int **VK\_SCROLL\_LOCK**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_SCROLL_LOCK)

### VK\_F1

public static final int **VK\_F1**

Constant for the F1 function key.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_F1)

### VK\_F2

public static final int **VK\_F2**

Constant for the F2 function key.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_F2)

### VK\_F3

public static final int **VK\_F3**

Constant for the F3 function key.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_F3)

### VK\_F4

public static final int **VK\_F4**

Constant for the F4 function key.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_F4)

### VK\_F5

public static final int **VK\_F5**

Constant for the F5 function key.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_F5)

### VK\_F6

public static final int **VK\_F6**

Constant for the F6 function key.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_F6)

### VK\_F7

public static final int **VK\_F7**

Constant for the F7 function key.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_F7)

### VK\_F8

public static final int **VK\_F8**

Constant for the F8 function key.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_F8)

### VK\_F9

public static final int **VK\_F9**

Constant for the F9 function key.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_F9)

### VK\_F10

public static final int **VK\_F10**

Constant for the F10 function key.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_F10)

### VK\_F11

public static final int **VK\_F11**

Constant for the F11 function key.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_F11)

### VK\_F12

public static final int **VK\_F12**

Constant for the F12 function key.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_F12)

### VK\_F13

public static final int **VK\_F13**

Constant for the F13 function key.

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_F13)

### VK\_F14

public static final int **VK\_F14**

Constant for the F14 function key.

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_F14)

### VK\_F15

public static final int **VK\_F15**

Constant for the F15 function key.

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_F15)

### VK\_F16

public static final int **VK\_F16**

Constant for the F16 function key.

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_F16)

### VK\_F17

public static final int **VK\_F17**

Constant for the F17 function key.

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_F17)

### VK\_F18

public static final int **VK\_F18**

Constant for the F18 function key.

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_F18)

### VK\_F19

public static final int **VK\_F19**

Constant for the F19 function key.

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_F19)

### VK\_F20

public static final int **VK\_F20**

Constant for the F20 function key.

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_F20)

### VK\_F21

public static final int **VK\_F21**

Constant for the F21 function key.

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_F21)

### VK\_F22

public static final int **VK\_F22**

Constant for the F22 function key.

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_F22)

### VK\_F23

public static final int **VK\_F23**

Constant for the F23 function key.

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_F23)

### VK\_F24

public static final int **VK\_F24**

Constant for the F24 function key.

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_F24)

### VK\_PRINTSCREEN

public static final int **VK\_PRINTSCREEN**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_PRINTSCREEN)

### VK\_INSERT

public static final int **VK\_INSERT**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_INSERT)

### VK\_HELP

public static final int **VK\_HELP**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_HELP)

### VK\_META

public static final int **VK\_META**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_META)

### VK\_BACK\_QUOTE

public static final int **VK\_BACK\_QUOTE**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_BACK_QUOTE)

### VK\_QUOTE

public static final int **VK\_QUOTE**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_QUOTE)

### VK\_KP\_UP

public static final int **VK\_KP\_UP**

Constant for the numeric keypad **up** arrow key.

**Since:** 1.2 **See Also:**[VK\_UP](http://docs.google.com/java/awt/event/KeyEvent.html#VK_UP), [Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_KP_UP)

### VK\_KP\_DOWN

public static final int **VK\_KP\_DOWN**

Constant for the numeric keypad **down** arrow key.

**Since:** 1.2 **See Also:**[VK\_DOWN](http://docs.google.com/java/awt/event/KeyEvent.html#VK_DOWN), [Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_KP_DOWN)

### VK\_KP\_LEFT

public static final int **VK\_KP\_LEFT**

Constant for the numeric keypad **left** arrow key.

**Since:** 1.2 **See Also:**[VK\_LEFT](http://docs.google.com/java/awt/event/KeyEvent.html#VK_LEFT), [Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_KP_LEFT)

### VK\_KP\_RIGHT

public static final int **VK\_KP\_RIGHT**

Constant for the numeric keypad **right** arrow key.

**Since:** 1.2 **See Also:**[VK\_RIGHT](http://docs.google.com/java/awt/event/KeyEvent.html#VK_RIGHT), [Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_KP_RIGHT)

### VK\_DEAD\_GRAVE

public static final int **VK\_DEAD\_GRAVE**

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_DEAD_GRAVE)

### VK\_DEAD\_ACUTE

public static final int **VK\_DEAD\_ACUTE**

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_DEAD_ACUTE)

### VK\_DEAD\_CIRCUMFLEX

public static final int **VK\_DEAD\_CIRCUMFLEX**

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_DEAD_CIRCUMFLEX)

### VK\_DEAD\_TILDE

public static final int **VK\_DEAD\_TILDE**

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_DEAD_TILDE)

### VK\_DEAD\_MACRON

public static final int **VK\_DEAD\_MACRON**

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_DEAD_MACRON)

### VK\_DEAD\_BREVE

public static final int **VK\_DEAD\_BREVE**

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_DEAD_BREVE)

### VK\_DEAD\_ABOVEDOT

public static final int **VK\_DEAD\_ABOVEDOT**

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_DEAD_ABOVEDOT)

### VK\_DEAD\_DIAERESIS

public static final int **VK\_DEAD\_DIAERESIS**

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_DEAD_DIAERESIS)

### VK\_DEAD\_ABOVERING

public static final int **VK\_DEAD\_ABOVERING**

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_DEAD_ABOVERING)

### VK\_DEAD\_DOUBLEACUTE

public static final int **VK\_DEAD\_DOUBLEACUTE**

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_DEAD_DOUBLEACUTE)

### VK\_DEAD\_CARON

public static final int **VK\_DEAD\_CARON**

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_DEAD_CARON)

### VK\_DEAD\_CEDILLA

public static final int **VK\_DEAD\_CEDILLA**

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_DEAD_CEDILLA)

### VK\_DEAD\_OGONEK

public static final int **VK\_DEAD\_OGONEK**

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_DEAD_OGONEK)

### VK\_DEAD\_IOTA

public static final int **VK\_DEAD\_IOTA**

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_DEAD_IOTA)

### VK\_DEAD\_VOICED\_SOUND

public static final int **VK\_DEAD\_VOICED\_SOUND**

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_DEAD_VOICED_SOUND)

### VK\_DEAD\_SEMIVOICED\_SOUND

public static final int **VK\_DEAD\_SEMIVOICED\_SOUND**

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_DEAD_SEMIVOICED_SOUND)

### VK\_AMPERSAND

public static final int **VK\_AMPERSAND**

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_AMPERSAND)

### VK\_ASTERISK

public static final int **VK\_ASTERISK**

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_ASTERISK)

### VK\_QUOTEDBL

public static final int **VK\_QUOTEDBL**

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_QUOTEDBL)

### VK\_LESS

public static final int **VK\_LESS**

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_LESS)

### VK\_GREATER

public static final int **VK\_GREATER**

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_GREATER)

### VK\_BRACELEFT

public static final int **VK\_BRACELEFT**

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_BRACELEFT)

### VK\_BRACERIGHT

public static final int **VK\_BRACERIGHT**

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_BRACERIGHT)

### VK\_AT

public static final int **VK\_AT**

Constant for the "@" key.

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_AT)

### VK\_COLON

public static final int **VK\_COLON**

Constant for the ":" key.

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_COLON)

### VK\_CIRCUMFLEX

public static final int **VK\_CIRCUMFLEX**

Constant for the "^" key.

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_CIRCUMFLEX)

### VK\_DOLLAR

public static final int **VK\_DOLLAR**

Constant for the "$" key.

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_DOLLAR)

### VK\_EURO\_SIGN

public static final int **VK\_EURO\_SIGN**

Constant for the Euro currency sign key.

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_EURO_SIGN)

### VK\_EXCLAMATION\_MARK

public static final int **VK\_EXCLAMATION\_MARK**

Constant for the "!" key.

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_EXCLAMATION_MARK)

### VK\_INVERTED\_EXCLAMATION\_MARK

public static final int **VK\_INVERTED\_EXCLAMATION\_MARK**

Constant for the inverted exclamation mark key.

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_INVERTED_EXCLAMATION_MARK)

### VK\_LEFT\_PARENTHESIS

public static final int **VK\_LEFT\_PARENTHESIS**

Constant for the "(" key.

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_LEFT_PARENTHESIS)

### VK\_NUMBER\_SIGN

public static final int **VK\_NUMBER\_SIGN**

Constant for the "#" key.

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_NUMBER_SIGN)

### VK\_PLUS

public static final int **VK\_PLUS**

Constant for the "+" key.

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_PLUS)

### VK\_RIGHT\_PARENTHESIS

public static final int **VK\_RIGHT\_PARENTHESIS**

Constant for the ")" key.

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_RIGHT_PARENTHESIS)

### VK\_UNDERSCORE

public static final int **VK\_UNDERSCORE**

Constant for the "\_" key.

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_UNDERSCORE)

### VK\_WINDOWS

public static final int **VK\_WINDOWS**

Constant for the Microsoft Windows "Windows" key. It is used for both the left and right version of the key.

**Since:** 1.5 **See Also:**[getKeyLocation()](http://docs.google.com/java/awt/event/KeyEvent.html#getKeyLocation()), [Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_WINDOWS)

### VK\_CONTEXT\_MENU

public static final int **VK\_CONTEXT\_MENU**

Constant for the Microsoft Windows Context Menu key.

**Since:** 1.5 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_CONTEXT_MENU)

### VK\_FINAL

public static final int **VK\_FINAL**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_FINAL)

### VK\_CONVERT

public static final int **VK\_CONVERT**

Constant for the Convert function key.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_CONVERT)

### VK\_NONCONVERT

public static final int **VK\_NONCONVERT**

Constant for the Don't Convert function key.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_NONCONVERT)

### VK\_ACCEPT

public static final int **VK\_ACCEPT**

Constant for the Accept or Commit function key.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_ACCEPT)

### VK\_MODECHANGE

public static final int **VK\_MODECHANGE**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_MODECHANGE)

### VK\_KANA

public static final int **VK\_KANA**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_KANA)

### VK\_KANJI

public static final int **VK\_KANJI**

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_KANJI)

### VK\_ALPHANUMERIC

public static final int **VK\_ALPHANUMERIC**

Constant for the Alphanumeric function key.

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_ALPHANUMERIC)

### VK\_KATAKANA

public static final int **VK\_KATAKANA**

Constant for the Katakana function key.

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_KATAKANA)

### VK\_HIRAGANA

public static final int **VK\_HIRAGANA**

Constant for the Hiragana function key.

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_HIRAGANA)

### VK\_FULL\_WIDTH

public static final int **VK\_FULL\_WIDTH**

Constant for the Full-Width Characters function key.

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_FULL_WIDTH)

### VK\_HALF\_WIDTH

public static final int **VK\_HALF\_WIDTH**

Constant for the Half-Width Characters function key.

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_HALF_WIDTH)

### VK\_ROMAN\_CHARACTERS

public static final int **VK\_ROMAN\_CHARACTERS**

Constant for the Roman Characters function key.

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_ROMAN_CHARACTERS)

### VK\_ALL\_CANDIDATES

public static final int **VK\_ALL\_CANDIDATES**

Constant for the All Candidates function key.

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_ALL_CANDIDATES)

### VK\_PREVIOUS\_CANDIDATE

public static final int **VK\_PREVIOUS\_CANDIDATE**

Constant for the Previous Candidate function key.

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_PREVIOUS_CANDIDATE)

### VK\_CODE\_INPUT

public static final int **VK\_CODE\_INPUT**

Constant for the Code Input function key.

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_CODE_INPUT)

### VK\_JAPANESE\_KATAKANA

public static final int **VK\_JAPANESE\_KATAKANA**

Constant for the Japanese-Katakana function key. This key switches to a Japanese input method and selects its Katakana input mode.

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_JAPANESE_KATAKANA)

### VK\_JAPANESE\_HIRAGANA

public static final int **VK\_JAPANESE\_HIRAGANA**

Constant for the Japanese-Hiragana function key. This key switches to a Japanese input method and selects its Hiragana input mode.

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_JAPANESE_HIRAGANA)

### VK\_JAPANESE\_ROMAN

public static final int **VK\_JAPANESE\_ROMAN**

Constant for the Japanese-Roman function key. This key switches to a Japanese input method and selects its Roman-Direct input mode.

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_JAPANESE_ROMAN)

### VK\_KANA\_LOCK

public static final int **VK\_KANA\_LOCK**

Constant for the locking Kana function key. This key locks the keyboard into a Kana layout.

**Since:** 1.3 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_KANA_LOCK)

### VK\_INPUT\_METHOD\_ON\_OFF

public static final int **VK\_INPUT\_METHOD\_ON\_OFF**

Constant for the input method on/off key.

**Since:** 1.3 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_INPUT_METHOD_ON_OFF)

### VK\_CUT

public static final int **VK\_CUT**

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_CUT)

### VK\_COPY

public static final int **VK\_COPY**

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_COPY)

### VK\_PASTE

public static final int **VK\_PASTE**

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_PASTE)

### VK\_UNDO

public static final int **VK\_UNDO**

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_UNDO)

### VK\_AGAIN

public static final int **VK\_AGAIN**

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_AGAIN)

### VK\_FIND

public static final int **VK\_FIND**

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_FIND)

### VK\_PROPS

public static final int **VK\_PROPS**

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_PROPS)

### VK\_STOP

public static final int **VK\_STOP**

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_STOP)

### VK\_COMPOSE

public static final int **VK\_COMPOSE**

Constant for the Compose function key.

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_COMPOSE)

### VK\_ALT\_GRAPH

public static final int **VK\_ALT\_GRAPH**

Constant for the AltGraph function key.

**Since:** 1.2 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_ALT_GRAPH)

### VK\_BEGIN

public static final int **VK\_BEGIN**

Constant for the Begin key.

**Since:** 1.5 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_BEGIN)

### VK\_UNDEFINED

public static final int **VK\_UNDEFINED**

This value is used to indicate that the keyCode is unknown. KEY\_TYPED events do not have a keyCode value; this value is used instead.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.VK_UNDEFINED)

### CHAR\_UNDEFINED

public static final char **CHAR\_UNDEFINED**

KEY\_PRESSED and KEY\_RELEASED events which do not map to a valid Unicode character use this for the keyChar value.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.CHAR_UNDEFINED)

### KEY\_LOCATION\_UNKNOWN

public static final int **KEY\_LOCATION\_UNKNOWN**

A constant indicating that the keyLocation is indeterminate or not relevant. KEY\_TYPED events do not have a keyLocation; this value is used instead.

**Since:** 1.4 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.KEY_LOCATION_UNKNOWN)

### KEY\_LOCATION\_STANDARD

public static final int **KEY\_LOCATION\_STANDARD**

A constant indicating that the key pressed or released is not distinguished as the left or right version of a key, and did not originate on the numeric keypad (or did not originate with a virtual key corresponding to the numeric keypad).

**Since:** 1.4 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.KEY_LOCATION_STANDARD)

### KEY\_LOCATION\_LEFT

public static final int **KEY\_LOCATION\_LEFT**

A constant indicating that the key pressed or released is in the left key location (there is more than one possible location for this key). Example: the left shift key.

**Since:** 1.4 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.KEY_LOCATION_LEFT)

### KEY\_LOCATION\_RIGHT

public static final int **KEY\_LOCATION\_RIGHT**

A constant indicating that the key pressed or released is in the right key location (there is more than one possible location for this key). Example: the right shift key.

**Since:** 1.4 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.KEY_LOCATION_RIGHT)

### KEY\_LOCATION\_NUMPAD

public static final int **KEY\_LOCATION\_NUMPAD**

A constant indicating that the key event originated on the numeric keypad or with a virtual key corresponding to the numeric keypad.

**Since:** 1.4 **See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#java.awt.event.KeyEvent.KEY_LOCATION_NUMPAD)

| **Constructor Detail** |
| --- |

### KeyEvent

public **KeyEvent**([Component](http://docs.google.com/java/awt/Component.html) source,  
 int id,  
 long when,  
 int modifiers,  
 int keyCode,  
 char keyChar,  
 int keyLocation)

### KeyEvent

public **KeyEvent**([Component](http://docs.google.com/java/awt/Component.html) source,  
 int id,  
 long when,  
 int modifiers,  
 int keyCode,  
 char keyChar)

Constructs a KeyEvent object.

Note that passing in an invalid id results in unspecified behavior. This method throws an IllegalArgumentException if source is null.

**Parameters:**source - the Component that originated the eventid - an integer identifying the type of eventwhen - a long integer that specifies the time the event occurredmodifiers - the modifier keys down during event (shift, ctrl, alt, meta) Either extended \_DOWN\_MASK or old \_MASK modifiers should be used, but both models should not be mixed in one event. Use of the extended modifiers is preferred.keyCode - the integer code for an actual key, or VK\_UNDEFINED (for a key-typed event)keyChar - the Unicode character generated by this event, or CHAR\_UNDEFINED (for key-pressed and key-released events which do not map to a valid Unicode character) **Throws:** [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - if id is KEY\_TYPED and keyChar is CHAR\_UNDEFINED; or if id is KEY\_TYPED and keyCode is not VK\_UNDEFINED [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - if source is null

### KeyEvent

[@Deprecated](http://docs.google.com/java/lang/Deprecated.html)  
public **KeyEvent**([Component](http://docs.google.com/java/awt/Component.html) source,  
 int id,  
 long when,  
 int modifiers,  
 int keyCode)

**Deprecated.** *as of JDK1.1*

| **Method Detail** |
| --- |

### getKeyCode

public int **getKeyCode**()

Returns the integer keyCode associated with the key in this event.

**Returns:**the integer code for an actual key on the keyboard. (For KEY\_TYPED events, the keyCode is VK\_UNDEFINED.)

### setKeyCode

public void **setKeyCode**(int keyCode)

Set the keyCode value to indicate a physical key.

**Parameters:**keyCode - an integer corresponding to an actual key on the keyboard.

### getKeyChar

public char **getKeyChar**()

Returns the character associated with the key in this event. For example, the KEY\_TYPED event for shift + "a" returns the value for "A".

KEY\_PRESSED and KEY\_RELEASED events are not intended for reporting of character input. Therefore, the values returned by this method are guaranteed to be meaningful only for KEY\_TYPED events.

**Returns:**the Unicode character defined for this key event. If no valid Unicode character exists for this key event, CHAR\_UNDEFINED is returned.

### setKeyChar

public void **setKeyChar**(char keyChar)

Set the keyChar value to indicate a logical character.

**Parameters:**keyChar - a char corresponding to to the combination of keystrokes that make up this event.

### setModifiers

[@Deprecated](http://docs.google.com/java/lang/Deprecated.html)  
public void **setModifiers**(int modifiers)

**Deprecated.** *as of JDK1.1.4*

Set the modifiers to indicate additional keys that were held down (e.g. shift, ctrl, alt, meta) defined as part of InputEvent.

NOTE: use of this method is not recommended, because many AWT implementations do not recognize modifier changes. This is especially true for KEY\_TYPED events where the shift modifier is changed.

**Parameters:**modifiers - an integer combination of the modifier constants.**See Also:**[InputEvent](http://docs.google.com/java/awt/event/InputEvent.html)

### getKeyLocation

public int **getKeyLocation**()

Returns the location of the key that originated this key event. Some keys occur more than once on a keyboard, e.g. the left and right shift keys. Additionally, some keys occur on the numeric keypad. This provides a way of distinguishing such keys.

**Returns:**the location of the key that was pressed or released. Always returns KEY\_LOCATION\_UNKNOWN for KEY\_TYPED events.**Since:** 1.4

### getKeyText

public static [String](http://docs.google.com/java/lang/String.html) **getKeyText**(int keyCode)

Returns a String describing the keyCode, such as "HOME", "F1" or "A". These strings can be localized by changing the awt.properties file.

**Returns:**a string containing a text description for a physical key, identified by its keyCode

### getKeyModifiersText

public static [String](http://docs.google.com/java/lang/String.html) **getKeyModifiersText**(int modifiers)

Returns a String describing the modifier key(s), such as "Shift", or "Ctrl+Shift". These strings can be localized by changing the awt.properties file.

Note that InputEvent.ALT\_MASK and InputEvent.BUTTON2\_MASK have the same value, so the string "Alt" is returned for both modifiers. Likewise, InputEvent.META\_MASK and InputEvent.BUTTON3\_MASK have the same value, so the string "Meta" is returned for both modifiers.

**Returns:**string a text description of the combination of modifier keys that were held down during the event**See Also:**[InputEvent.getModifiersExText(int)](http://docs.google.com/java/awt/event/InputEvent.html#getModifiersExText(int))

### isActionKey

public boolean **isActionKey**()

Returns whether the key in this event is an "action" key. Typically an action key does not fire a unicode character and is not a modifier key.

**Returns:**true if the key is an "action" key, false otherwise

### paramString

public [String](http://docs.google.com/java/lang/String.html) **paramString**()

Returns a parameter string identifying this event. This method is useful for event logging and for debugging.

**Overrides:**[paramString](http://docs.google.com/java/awt/event/ComponentEvent.html#paramString()) in class [ComponentEvent](http://docs.google.com/java/awt/event/ComponentEvent.html) **Returns:**a string identifying the event and its attributes

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/KeyEvent.html) | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-files/index-1.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | --- | --- | | | ***Java™ Platform***  ***Standard Ed. 6*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [**PREV CLASS**](http://docs.google.com/java/awt/event/KeyAdapter.html)   [**NEXT CLASS**](http://docs.google.com/java/awt/event/KeyListener.html) | [**FRAMES**](http://docs.google.com/index.html?java/awt/event/KeyEvent.html)    [**NO FRAMES**](http://docs.google.com/KeyEvent.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#3znysh7) | [CONSTR](#4d34og8) | [METHOD](#2s8eyo1) | DETAIL: [FIELD](#1ksv4uv) | [CONSTR](#2i9l8ns) | [METHOD](#4gjguf0) |

[Submit a bug or feature](http://bugs.sun.com/services/bugreport/index.jsp)

For further API reference and developer documentation, see [Java SE Developer Documentation](http://docs.google.com/webnotes/devdocs-vs-specs.html). That documentation contains more detailed, developer-targeted descriptions, with conceptual overviews, definitions of terms, workarounds, and working code examples.

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