| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/AbstractBorder.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   [**NEXT CLASS**](http://docs.google.com/javax/swing/border/BevelBorder.html) | [**FRAMES**](http://docs.google.com/index.html?javax/swing/border/AbstractBorder.html)    [**NO FRAMES**](http://docs.google.com/AbstractBorder.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#3dy6vkm) | [METHOD](#4d34og8) |

## **javax.swing.border**

Class AbstractBorder

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 **javax.swing.border.AbstractBorder**

**All Implemented Interfaces:** [Serializable](http://docs.google.com/java/io/Serializable.html), [Border](http://docs.google.com/javax/swing/border/Border.html) **Direct Known Subclasses:** [BasicBorders.ButtonBorder](http://docs.google.com/javax/swing/plaf/basic/BasicBorders.ButtonBorder.html), [BasicBorders.FieldBorder](http://docs.google.com/javax/swing/plaf/basic/BasicBorders.FieldBorder.html), [BasicBorders.MarginBorder](http://docs.google.com/javax/swing/plaf/basic/BasicBorders.MarginBorder.html), [BasicBorders.MenuBarBorder](http://docs.google.com/javax/swing/plaf/basic/BasicBorders.MenuBarBorder.html), [BevelBorder](http://docs.google.com/javax/swing/border/BevelBorder.html), [CompoundBorder](http://docs.google.com/javax/swing/border/CompoundBorder.html), [EmptyBorder](http://docs.google.com/javax/swing/border/EmptyBorder.html), [EtchedBorder](http://docs.google.com/javax/swing/border/EtchedBorder.html), [LineBorder](http://docs.google.com/javax/swing/border/LineBorder.html), [MetalBorders.ButtonBorder](http://docs.google.com/javax/swing/plaf/metal/MetalBorders.ButtonBorder.html), [MetalBorders.Flush3DBorder](http://docs.google.com/javax/swing/plaf/metal/MetalBorders.Flush3DBorder.html), [MetalBorders.InternalFrameBorder](http://docs.google.com/javax/swing/plaf/metal/MetalBorders.InternalFrameBorder.html), [MetalBorders.MenuBarBorder](http://docs.google.com/javax/swing/plaf/metal/MetalBorders.MenuBarBorder.html), [MetalBorders.MenuItemBorder](http://docs.google.com/javax/swing/plaf/metal/MetalBorders.MenuItemBorder.html), [MetalBorders.OptionDialogBorder](http://docs.google.com/javax/swing/plaf/metal/MetalBorders.OptionDialogBorder.html), [MetalBorders.PaletteBorder](http://docs.google.com/javax/swing/plaf/metal/MetalBorders.PaletteBorder.html), [MetalBorders.PopupMenuBorder](http://docs.google.com/javax/swing/plaf/metal/MetalBorders.PopupMenuBorder.html), [MetalBorders.ScrollPaneBorder](http://docs.google.com/javax/swing/plaf/metal/MetalBorders.ScrollPaneBorder.html), [MetalBorders.TableHeaderBorder](http://docs.google.com/javax/swing/plaf/metal/MetalBorders.TableHeaderBorder.html), [MetalBorders.ToolBarBorder](http://docs.google.com/javax/swing/plaf/metal/MetalBorders.ToolBarBorder.html), [TitledBorder](http://docs.google.com/javax/swing/border/TitledBorder.html)

public abstract class **AbstractBorder**extends [Object](http://docs.google.com/java/lang/Object.html)implements [Border](http://docs.google.com/javax/swing/border/Border.html), [Serializable](http://docs.google.com/java/io/Serializable.html)

A class that implements an empty border with no size. This provides a convenient base class from which other border classes can be easily derived.

**Warning:** Serialized objects of this class will not be compatible with future Swing releases. The current serialization support is appropriate for short term storage or RMI between applications running the same version of Swing. As of 1.4, support for long term storage of all JavaBeansTM has been added to the java.beans package. Please see [XMLEncoder](http://docs.google.com/java/beans/XMLEncoder.html).

| **Constructor Summary** | |
| --- | --- |
| [**AbstractBorder**](http://docs.google.com/javax/swing/border/AbstractBorder.html#AbstractBorder())() |

| **Method Summary** | |
| --- | --- |
| int | [**getBaseline**](http://docs.google.com/javax/swing/border/AbstractBorder.html#getBaseline(java.awt.Component,%20int,%20int))([Component](http://docs.google.com/java/awt/Component.html) c, int width, int height)            Returns the baseline. |
| [Component.BaselineResizeBehavior](http://docs.google.com/java/awt/Component.BaselineResizeBehavior.html) | [**getBaselineResizeBehavior**](http://docs.google.com/javax/swing/border/AbstractBorder.html#getBaselineResizeBehavior(java.awt.Component))([Component](http://docs.google.com/java/awt/Component.html) c)            Returns an enum indicating how the baseline of a component changes as the size changes. |
| [Insets](http://docs.google.com/java/awt/Insets.html) | [**getBorderInsets**](http://docs.google.com/javax/swing/border/AbstractBorder.html#getBorderInsets(java.awt.Component))([Component](http://docs.google.com/java/awt/Component.html) c)            This default implementation returns a new Insets instance where the top, left, bottom, and right fields are set to 0. |
| [Insets](http://docs.google.com/java/awt/Insets.html) | [**getBorderInsets**](http://docs.google.com/javax/swing/border/AbstractBorder.html#getBorderInsets(java.awt.Component,%20java.awt.Insets))([Component](http://docs.google.com/java/awt/Component.html) c, [Insets](http://docs.google.com/java/awt/Insets.html) insets)            Reinitializes the insets parameter with this Border's current Insets. |
| static [Rectangle](http://docs.google.com/java/awt/Rectangle.html) | [**getInteriorRectangle**](http://docs.google.com/javax/swing/border/AbstractBorder.html#getInteriorRectangle(java.awt.Component,%20javax.swing.border.Border,%20int,%20int,%20int,%20int))([Component](http://docs.google.com/java/awt/Component.html) c, [Border](http://docs.google.com/javax/swing/border/Border.html) b, int x, int y, int width, int height)            Returns a rectangle using the arguments minus the insets of the border. |
| [Rectangle](http://docs.google.com/java/awt/Rectangle.html) | [**getInteriorRectangle**](http://docs.google.com/javax/swing/border/AbstractBorder.html#getInteriorRectangle(java.awt.Component,%20int,%20int,%20int,%20int))([Component](http://docs.google.com/java/awt/Component.html) c, int x, int y, int width, int height)            This convenience method calls the static method. |
| boolean | [**isBorderOpaque**](http://docs.google.com/javax/swing/border/AbstractBorder.html#isBorderOpaque())()            This default implementation returns false. |
| void | [**paintBorder**](http://docs.google.com/javax/swing/border/AbstractBorder.html#paintBorder(java.awt.Component,%20java.awt.Graphics,%20int,%20int,%20int,%20int))([Component](http://docs.google.com/java/awt/Component.html) c, [Graphics](http://docs.google.com/java/awt/Graphics.html) g, int x, int y, int width, int height)            This default implementation does no painting. |

| **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()), [toString](http://docs.google.com/java/lang/Object.html#toString()), [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)) |

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

### AbstractBorder

public **AbstractBorder**()

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

### paintBorder

public void **paintBorder**([Component](http://docs.google.com/java/awt/Component.html) c,  
 [Graphics](http://docs.google.com/java/awt/Graphics.html) g,  
 int x,  
 int y,  
 int width,  
 int height)

This default implementation does no painting.

**Specified by:**[paintBorder](http://docs.google.com/javax/swing/border/Border.html#paintBorder(java.awt.Component,%20java.awt.Graphics,%20int,%20int,%20int,%20int)) in interface [Border](http://docs.google.com/javax/swing/border/Border.html) **Parameters:**c - the component for which this border is being paintedg - the paint graphicsx - the x position of the painted bordery - the y position of the painted borderwidth - the width of the painted borderheight - the height of the painted border

### getBorderInsets

public [Insets](http://docs.google.com/java/awt/Insets.html) **getBorderInsets**([Component](http://docs.google.com/java/awt/Component.html) c)

This default implementation returns a new Insets instance where the top, left, bottom, and right fields are set to 0.

**Specified by:**[getBorderInsets](http://docs.google.com/javax/swing/border/Border.html#getBorderInsets(java.awt.Component)) in interface [Border](http://docs.google.com/javax/swing/border/Border.html) **Parameters:**c - the component for which this border insets value applies **Returns:**the new Insets object initialized to 0

### getBorderInsets

public [Insets](http://docs.google.com/java/awt/Insets.html) **getBorderInsets**([Component](http://docs.google.com/java/awt/Component.html) c,  
 [Insets](http://docs.google.com/java/awt/Insets.html) insets)

Reinitializes the insets parameter with this Border's current Insets.

**Parameters:**c - the component for which this border insets value appliesinsets - the object to be reinitialized **Returns:**the insets object

### isBorderOpaque

public boolean **isBorderOpaque**()

This default implementation returns false.

**Specified by:**[isBorderOpaque](http://docs.google.com/javax/swing/border/Border.html#isBorderOpaque()) in interface [Border](http://docs.google.com/javax/swing/border/Border.html) **Returns:**false

### getInteriorRectangle

public [Rectangle](http://docs.google.com/java/awt/Rectangle.html) **getInteriorRectangle**([Component](http://docs.google.com/java/awt/Component.html) c,  
 int x,  
 int y,  
 int width,  
 int height)

This convenience method calls the static method.

**Parameters:**c - the component for which this border is being computedx - the x position of the bordery - the y position of the borderwidth - the width of the borderheight - the height of the border **Returns:**a Rectangle containing the interior coordinates

### getInteriorRectangle

public static [Rectangle](http://docs.google.com/java/awt/Rectangle.html) **getInteriorRectangle**([Component](http://docs.google.com/java/awt/Component.html) c,  
 [Border](http://docs.google.com/javax/swing/border/Border.html) b,  
 int x,  
 int y,  
 int width,  
 int height)

Returns a rectangle using the arguments minus the insets of the border. This is useful for determining the area that components should draw in that will not intersect the border.

**Parameters:**c - the component for which this border is being computedb - the Border objectx - the x position of the bordery - the y position of the borderwidth - the width of the borderheight - the height of the border **Returns:**a Rectangle containing the interior coordinates

### getBaseline

public int **getBaseline**([Component](http://docs.google.com/java/awt/Component.html) c,  
 int width,  
 int height)

Returns the baseline. A return value less than 0 indicates the border does not have a reasonable baseline.

The default implementation returns -1. Subclasses that support baseline should override appropriately. If a value >= 0 is returned, then the component has a valid baseline for any size >= the minimum size and getBaselineResizeBehavior can be used to determine how the baseline changes with size.

**Parameters:**c - Component baseline is being requested forwidth - the width to get the baseline forheight - the height to get the baseline for **Returns:**the baseline or < 0 indicating there is no reasonable baseline **Throws:** [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - if width or height is < 0**Since:** 1.6 **See Also:**[Component.getBaseline(int,int)](http://docs.google.com/java/awt/Component.html#getBaseline(int,%20int)), [Component.getBaselineResizeBehavior()](http://docs.google.com/java/awt/Component.html#getBaselineResizeBehavior())

### getBaselineResizeBehavior

public [Component.BaselineResizeBehavior](http://docs.google.com/java/awt/Component.BaselineResizeBehavior.html) **getBaselineResizeBehavior**([Component](http://docs.google.com/java/awt/Component.html) c)

Returns an enum indicating how the baseline of a component changes as the size changes. This method is primarily meant for layout managers and GUI builders.

The default implementation returns BaselineResizeBehavior.OTHER, subclasses that support baseline should override appropriately. Subclasses should never return null; if the baseline can not be calculated return BaselineResizeBehavior.OTHER. Callers should first ask for the baseline using getBaseline and if a value >= 0 is returned use this method. It is acceptable for this method to return a value other than BaselineResizeBehavior.OTHER even if getBaseline returns a value less than 0.

**Parameters:**c - Component to return baseline resize behavior for **Returns:**an enum indicating how the baseline changes as the border is resized**Since:** 1.6 **See Also:**[Component.getBaseline(int,int)](http://docs.google.com/java/awt/Component.html#getBaseline(int,%20int)), [Component.getBaselineResizeBehavior()](http://docs.google.com/java/awt/Component.html#getBaselineResizeBehavior())

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/AbstractBorder.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   [**NEXT CLASS**](http://docs.google.com/javax/swing/border/BevelBorder.html) | [**FRAMES**](http://docs.google.com/index.html?javax/swing/border/AbstractBorder.html)    [**NO FRAMES**](http://docs.google.com/AbstractBorder.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#3dy6vkm) | [METHOD](#4d34og8) |

[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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