| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/EtchedBorder.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/javax/swing/border/EmptyBorder.html)   [**NEXT CLASS**](http://docs.google.com/javax/swing/border/LineBorder.html) | [**FRAMES**](http://docs.google.com/index.html?javax/swing/border/EtchedBorder.html)    [**NO FRAMES**](http://docs.google.com/EtchedBorder.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#3znysh7) | [CONSTR](#2et92p0) | [METHOD](#tyjcwt) | DETAIL: [FIELD](#4d34og8) | [CONSTR](#35nkun2) | [METHOD](#3j2qqm3) |

## **javax.swing.border**

Class EtchedBorder

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

**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:** [BorderUIResource.EtchedBorderUIResource](http://docs.google.com/javax/swing/plaf/BorderUIResource.EtchedBorderUIResource.html)

public class **EtchedBorder**extends [AbstractBorder](http://docs.google.com/javax/swing/border/AbstractBorder.html)

A class which implements a simple etched border which can either be etched-in or etched-out. If no highlight/shadow colors are initialized when the border is created, then these colors will be dynamically derived from the background color of the component argument passed into the paintBorder() method.

**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).

| **Field Summary** | |
| --- | --- |
| protected  int | [**etchType**](http://docs.google.com/javax/swing/border/EtchedBorder.html#etchType) |
| protected  [Color](http://docs.google.com/java/awt/Color.html) | [**highlight**](http://docs.google.com/javax/swing/border/EtchedBorder.html#highlight) |
| static int | [**LOWERED**](http://docs.google.com/javax/swing/border/EtchedBorder.html#LOWERED)            Lowered etched type. |
| static int | [**RAISED**](http://docs.google.com/javax/swing/border/EtchedBorder.html#RAISED)            Raised etched type. |
| protected  [Color](http://docs.google.com/java/awt/Color.html) | [**shadow**](http://docs.google.com/javax/swing/border/EtchedBorder.html#shadow) |

| **Constructor Summary** | |
| --- | --- |
| [**EtchedBorder**](http://docs.google.com/javax/swing/border/EtchedBorder.html#EtchedBorder())()            Creates a lowered etched border whose colors will be derived from the background color of the component passed into the paintBorder method. |
| [**EtchedBorder**](http://docs.google.com/javax/swing/border/EtchedBorder.html#EtchedBorder(java.awt.Color,%20java.awt.Color))([Color](http://docs.google.com/java/awt/Color.html) highlight, [Color](http://docs.google.com/java/awt/Color.html) shadow)            Creates a lowered etched border with the specified highlight and shadow colors. |
| [**EtchedBorder**](http://docs.google.com/javax/swing/border/EtchedBorder.html#EtchedBorder(int))(int etchType)            Creates an etched border with the specified etch-type whose colors will be derived from the background color of the component passed into the paintBorder method. |
| [**EtchedBorder**](http://docs.google.com/javax/swing/border/EtchedBorder.html#EtchedBorder(int,%20java.awt.Color,%20java.awt.Color))(int etchType, [Color](http://docs.google.com/java/awt/Color.html) highlight, [Color](http://docs.google.com/java/awt/Color.html) shadow)            Creates an etched border with the specified etch-type, highlight and shadow colors. |

| **Method Summary** | |
| --- | --- |
| [Insets](http://docs.google.com/java/awt/Insets.html) | [**getBorderInsets**](http://docs.google.com/javax/swing/border/EtchedBorder.html#getBorderInsets(java.awt.Component))([Component](http://docs.google.com/java/awt/Component.html) c)            Returns the insets of the border. |
| [Insets](http://docs.google.com/java/awt/Insets.html) | [**getBorderInsets**](http://docs.google.com/javax/swing/border/EtchedBorder.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)            Reinitialize the insets parameter with this Border's current Insets. |
| int | [**getEtchType**](http://docs.google.com/javax/swing/border/EtchedBorder.html#getEtchType())()            Returns which etch-type is set on the etched border. |
| [Color](http://docs.google.com/java/awt/Color.html) | [**getHighlightColor**](http://docs.google.com/javax/swing/border/EtchedBorder.html#getHighlightColor())()            Returns the highlight color of the etched border. |
| [Color](http://docs.google.com/java/awt/Color.html) | [**getHighlightColor**](http://docs.google.com/javax/swing/border/EtchedBorder.html#getHighlightColor(java.awt.Component))([Component](http://docs.google.com/java/awt/Component.html) c)            Returns the highlight color of the etched border when rendered on the specified component. |
| [Color](http://docs.google.com/java/awt/Color.html) | [**getShadowColor**](http://docs.google.com/javax/swing/border/EtchedBorder.html#getShadowColor())()            Returns the shadow color of the etched border. |
| [Color](http://docs.google.com/java/awt/Color.html) | [**getShadowColor**](http://docs.google.com/javax/swing/border/EtchedBorder.html#getShadowColor(java.awt.Component))([Component](http://docs.google.com/java/awt/Component.html) c)            Returns the shadow color of the etched border when rendered on the specified component. |
| boolean | [**isBorderOpaque**](http://docs.google.com/javax/swing/border/EtchedBorder.html#isBorderOpaque())()            Returns whether or not the border is opaque. |
| void | [**paintBorder**](http://docs.google.com/javax/swing/border/EtchedBorder.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)            Paints the border for the specified component with the specified position and size. |

| **Methods inherited from class javax.swing.border.**[**AbstractBorder**](http://docs.google.com/javax/swing/border/AbstractBorder.html) |
| --- |
| [getBaseline](http://docs.google.com/javax/swing/border/AbstractBorder.html#getBaseline(java.awt.Component,%20int,%20int)), [getBaselineResizeBehavior](http://docs.google.com/javax/swing/border/AbstractBorder.html#getBaselineResizeBehavior(java.awt.Component)), [getInteriorRectangle](http://docs.google.com/javax/swing/border/AbstractBorder.html#getInteriorRectangle(java.awt.Component,%20javax.swing.border.Border,%20int,%20int,%20int,%20int)), [getInteriorRectangle](http://docs.google.com/javax/swing/border/AbstractBorder.html#getInteriorRectangle(java.awt.Component,%20int,%20int,%20int,%20int)) |

| **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)) |

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

### RAISED

public static final int **RAISED**

Raised etched type.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#javax.swing.border.EtchedBorder.RAISED)

### LOWERED

public static final int **LOWERED**

Lowered etched type.

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#javax.swing.border.EtchedBorder.LOWERED)

### etchType

protected int **etchType**

### highlight

protected [Color](http://docs.google.com/java/awt/Color.html) **highlight**

### shadow

protected [Color](http://docs.google.com/java/awt/Color.html) **shadow**

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

### EtchedBorder

public **EtchedBorder**()

Creates a lowered etched border whose colors will be derived from the background color of the component passed into the paintBorder method.

### EtchedBorder

public **EtchedBorder**(int etchType)

Creates an etched border with the specified etch-type whose colors will be derived from the background color of the component passed into the paintBorder method.

**Parameters:**etchType - the type of etch to be drawn by the border

### EtchedBorder

public **EtchedBorder**([Color](http://docs.google.com/java/awt/Color.html) highlight,  
 [Color](http://docs.google.com/java/awt/Color.html) shadow)

Creates a lowered etched border with the specified highlight and shadow colors.

**Parameters:**highlight - the color to use for the etched highlightshadow - the color to use for the etched shadow

### EtchedBorder

public **EtchedBorder**(int etchType,  
 [Color](http://docs.google.com/java/awt/Color.html) highlight,  
 [Color](http://docs.google.com/java/awt/Color.html) shadow)

Creates an etched border with the specified etch-type, highlight and shadow colors.

**Parameters:**etchType - the type of etch to be drawn by the borderhighlight - the color to use for the etched highlightshadow - the color to use for the etched shadow

| **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)

Paints the border for the specified component with the specified position and size.

**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)**Overrides:**[paintBorder](http://docs.google.com/javax/swing/border/AbstractBorder.html#paintBorder(java.awt.Component,%20java.awt.Graphics,%20int,%20int,%20int,%20int)) in class [AbstractBorder](http://docs.google.com/javax/swing/border/AbstractBorder.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)

Returns the insets of the border.

**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)**Overrides:**[getBorderInsets](http://docs.google.com/javax/swing/border/AbstractBorder.html#getBorderInsets(java.awt.Component)) in class [AbstractBorder](http://docs.google.com/javax/swing/border/AbstractBorder.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)

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

**Overrides:**[getBorderInsets](http://docs.google.com/javax/swing/border/AbstractBorder.html#getBorderInsets(java.awt.Component,%20java.awt.Insets)) in class [AbstractBorder](http://docs.google.com/javax/swing/border/AbstractBorder.html) **Parameters:**c - the component for which this border insets value appliesinsets - the object to be reinitialized **Returns:**the insets object

### isBorderOpaque

public boolean **isBorderOpaque**()

Returns whether or not the border is opaque.

**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)**Overrides:**[isBorderOpaque](http://docs.google.com/javax/swing/border/AbstractBorder.html#isBorderOpaque()) in class [AbstractBorder](http://docs.google.com/javax/swing/border/AbstractBorder.html) **Returns:**false

### getEtchType

public int **getEtchType**()

Returns which etch-type is set on the etched border.

### getHighlightColor

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

Returns the highlight color of the etched border when rendered on the specified component. If no highlight color was specified at instantiation, the highlight color is derived from the specified component's background color.

**Parameters:**c - the component for which the highlight may be derived**Since:** 1.3

### getHighlightColor

public [Color](http://docs.google.com/java/awt/Color.html) **getHighlightColor**()

Returns the highlight color of the etched border. Will return null if no highlight color was specified at instantiation.

**Since:** 1.3

### getShadowColor

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

Returns the shadow color of the etched border when rendered on the specified component. If no shadow color was specified at instantiation, the shadow color is derived from the specified component's background color.

**Parameters:**c - the component for which the shadow may be derived**Since:** 1.3

### getShadowColor

public [Color](http://docs.google.com/java/awt/Color.html) **getShadowColor**()

Returns the shadow color of the etched border. Will return null if no shadow color was specified at instantiation.

**Since:** 1.3

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/EtchedBorder.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/javax/swing/border/EmptyBorder.html)   [**NEXT CLASS**](http://docs.google.com/javax/swing/border/LineBorder.html) | [**FRAMES**](http://docs.google.com/index.html?javax/swing/border/EtchedBorder.html)    [**NO FRAMES**](http://docs.google.com/EtchedBorder.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#3znysh7) | [CONSTR](#2et92p0) | [METHOD](#tyjcwt) | DETAIL: [FIELD](#4d34og8) | [CONSTR](#35nkun2) | [METHOD](#3j2qqm3) |

[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.

Copyright 2006 Sun Microsystems, Inc. All rights reserved. Use is subject to [license terms](http://docs.google.com/legal/license.html). Also see the [documentation redistribution policy](http://java.sun.com/docs/redist.html).