| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/DataBufferShort.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/image/DataBufferInt.html)   [**NEXT CLASS**](http://docs.google.com/java/awt/image/DataBufferUShort.html) | [**FRAMES**](http://docs.google.com/index.html?java/awt/image/DataBufferShort.html)    [**NO FRAMES**](http://docs.google.com/DataBufferShort.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#2et92p0) | [CONSTR](#tyjcwt) | [METHOD](#3dy6vkm) | DETAIL: FIELD | [CONSTR](#2s8eyo1) | [METHOD](#44sinio) |

## **java.awt.image**

Class DataBufferShort

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 [java.awt.image.DataBuffer](http://docs.google.com/java/awt/image/DataBuffer.html)  
 **java.awt.image.DataBufferShort**

public final class **DataBufferShort**extends [DataBuffer](http://docs.google.com/java/awt/image/DataBuffer.html)

This class extends DataBuffer and stores data internally as shorts.

| **Field Summary** | |
| --- | --- |

| **Fields inherited from class java.awt.image.**[**DataBuffer**](http://docs.google.com/java/awt/image/DataBuffer.html) |
| --- |
| [banks](http://docs.google.com/java/awt/image/DataBuffer.html#banks), [dataType](http://docs.google.com/java/awt/image/DataBuffer.html#dataType), [offset](http://docs.google.com/java/awt/image/DataBuffer.html#offset), [offsets](http://docs.google.com/java/awt/image/DataBuffer.html#offsets), [size](http://docs.google.com/java/awt/image/DataBuffer.html#size), [TYPE\_BYTE](http://docs.google.com/java/awt/image/DataBuffer.html#TYPE_BYTE), [TYPE\_DOUBLE](http://docs.google.com/java/awt/image/DataBuffer.html#TYPE_DOUBLE), [TYPE\_FLOAT](http://docs.google.com/java/awt/image/DataBuffer.html#TYPE_FLOAT), [TYPE\_INT](http://docs.google.com/java/awt/image/DataBuffer.html#TYPE_INT), [TYPE\_SHORT](http://docs.google.com/java/awt/image/DataBuffer.html#TYPE_SHORT), [TYPE\_UNDEFINED](http://docs.google.com/java/awt/image/DataBuffer.html#TYPE_UNDEFINED), [TYPE\_USHORT](http://docs.google.com/java/awt/image/DataBuffer.html#TYPE_USHORT) |

| **Constructor Summary** | |
| --- | --- |
| [**DataBufferShort**](http://docs.google.com/java/awt/image/DataBufferShort.html#DataBufferShort(int))(int size)            Constructs a short-based DataBuffer with a single bank and the specified size. |
| [**DataBufferShort**](http://docs.google.com/java/awt/image/DataBufferShort.html#DataBufferShort(int,%20int))(int size, int numBanks)            Constructs a short-based DataBuffer with the specified number of banks all of which are the specified size. |
| [**DataBufferShort**](http://docs.google.com/java/awt/image/DataBufferShort.html#DataBufferShort(short%5B%5D%5B%5D,%20int))(short[][] dataArray, int size)            Constructs a short-based DataBuffer with the specified arrays. |
| [**DataBufferShort**](http://docs.google.com/java/awt/image/DataBufferShort.html#DataBufferShort(short%5B%5D%5B%5D,%20int,%20int%5B%5D))(short[][] dataArray, int size, int[] offsets)            Constructs a short-based DataBuffer with the specified arrays, size, and offsets. |
| [**DataBufferShort**](http://docs.google.com/java/awt/image/DataBufferShort.html#DataBufferShort(short%5B%5D,%20int))(short[] dataArray, int size)            Constructs a short-based DataBuffer with a single bank using the specified array. |
| [**DataBufferShort**](http://docs.google.com/java/awt/image/DataBufferShort.html#DataBufferShort(short%5B%5D,%20int,%20int))(short[] dataArray, int size, int offset)            Constructs a short-based DataBuffer with a single bank using the specified array, size, and offset. |

| **Method Summary** | |
| --- | --- |
| short[][] | [**getBankData**](http://docs.google.com/java/awt/image/DataBufferShort.html#getBankData())()            Returns the data arrays for all banks. |
| short[] | [**getData**](http://docs.google.com/java/awt/image/DataBufferShort.html#getData())()            Returns the default (first) byte data array. |
| short[] | [**getData**](http://docs.google.com/java/awt/image/DataBufferShort.html#getData(int))(int bank)            Returns the data array for the specified bank. |
| int | [**getElem**](http://docs.google.com/java/awt/image/DataBufferShort.html#getElem(int))(int i)            Returns the requested data array element from the first (default) bank. |
| int | [**getElem**](http://docs.google.com/java/awt/image/DataBufferShort.html#getElem(int,%20int))(int bank, int i)            Returns the requested data array element from the specified bank. |
| void | [**setElem**](http://docs.google.com/java/awt/image/DataBufferShort.html#setElem(int,%20int))(int i, int val)            Sets the requested data array element in the first (default) bank to the specified value. |
| void | [**setElem**](http://docs.google.com/java/awt/image/DataBufferShort.html#setElem(int,%20int,%20int))(int bank, int i, int val)            Sets the requested data array element in the specified bank from the given integer. |

| **Methods inherited from class java.awt.image.**[**DataBuffer**](http://docs.google.com/java/awt/image/DataBuffer.html) |
| --- |
| [getDataType](http://docs.google.com/java/awt/image/DataBuffer.html#getDataType()), [getDataTypeSize](http://docs.google.com/java/awt/image/DataBuffer.html#getDataTypeSize(int)), [getElemDouble](http://docs.google.com/java/awt/image/DataBuffer.html#getElemDouble(int)), [getElemDouble](http://docs.google.com/java/awt/image/DataBuffer.html#getElemDouble(int,%20int)), [getElemFloat](http://docs.google.com/java/awt/image/DataBuffer.html#getElemFloat(int)), [getElemFloat](http://docs.google.com/java/awt/image/DataBuffer.html#getElemFloat(int,%20int)), [getNumBanks](http://docs.google.com/java/awt/image/DataBuffer.html#getNumBanks()), [getOffset](http://docs.google.com/java/awt/image/DataBuffer.html#getOffset()), [getOffsets](http://docs.google.com/java/awt/image/DataBuffer.html#getOffsets()), [getSize](http://docs.google.com/java/awt/image/DataBuffer.html#getSize()), [setElemDouble](http://docs.google.com/java/awt/image/DataBuffer.html#setElemDouble(int,%20double)), [setElemDouble](http://docs.google.com/java/awt/image/DataBuffer.html#setElemDouble(int,%20int,%20double)), [setElemFloat](http://docs.google.com/java/awt/image/DataBuffer.html#setElemFloat(int,%20float)), [setElemFloat](http://docs.google.com/java/awt/image/DataBuffer.html#setElemFloat(int,%20int,%20float)) |

| **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** |
| --- |

### DataBufferShort

public **DataBufferShort**(int size)

Constructs a short-based DataBuffer with a single bank and the specified size.

**Parameters:**size - The size of the DataBuffer.

### DataBufferShort

public **DataBufferShort**(int size,  
 int numBanks)

Constructs a short-based DataBuffer with the specified number of banks all of which are the specified size.

**Parameters:**size - The size of the banks in the DataBuffer.numBanks - The number of banks in the aDataBuffer.

### DataBufferShort

public **DataBufferShort**(short[] dataArray,  
 int size)

Constructs a short-based DataBuffer with a single bank using the specified array. Only the first size elements should be used by accessors of this DataBuffer. dataArray must be large enough to hold size elements.

**Parameters:**dataArray - The short array for the DataBuffer.size - The size of the DataBuffer bank.

### DataBufferShort

public **DataBufferShort**(short[] dataArray,  
 int size,  
 int offset)

Constructs a short-based DataBuffer with a single bank using the specified array, size, and offset. dataArray must have at least offset + size elements. Only elements offset through offset + size - 1 should be used by accessors of this DataBuffer.

**Parameters:**dataArray - The short array for the DataBuffer.size - The size of the DataBuffer bank.offset - The offset into the dataArray.

### DataBufferShort

public **DataBufferShort**(short[][] dataArray,  
 int size)

Constructs a short-based DataBuffer with the specified arrays. The number of banks will be equal to dataArray.length. Only the first size elements of each array should be used by accessors of this DataBuffer.

**Parameters:**dataArray - The short arrays for the DataBuffer.size - The size of the banks in the DataBuffer.

### DataBufferShort

public **DataBufferShort**(short[][] dataArray,  
 int size,  
 int[] offsets)

Constructs a short-based DataBuffer with the specified arrays, size, and offsets. The number of banks is equal to dataArray.length. Each array must be at least as large as size + the corresponding offset. There must be an entry in the offset array for each dataArray entry. For each bank, only elements offset through offset + size - 1 should be used by accessors of this DataBuffer.

**Parameters:**dataArray - The short arrays for the DataBuffer.size - The size of the banks in the DataBuffer.offsets - The offsets into each array.

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

### getData

public short[] **getData**()

Returns the default (first) byte data array.

**Returns:**The first short data array.

### getData

public short[] **getData**(int bank)

Returns the data array for the specified bank.

**Parameters:**bank - The bank whose data array you want to get. **Returns:**The data array for the specified bank.

### getBankData

public short[][] **getBankData**()

Returns the data arrays for all banks.

**Returns:**All of the data arrays.

### getElem

public int **getElem**(int i)

Returns the requested data array element from the first (default) bank.

**Overrides:**[getElem](http://docs.google.com/java/awt/image/DataBuffer.html#getElem(int)) in class [DataBuffer](http://docs.google.com/java/awt/image/DataBuffer.html) **Parameters:**i - The data array element you want to get. **Returns:**The requested data array element as an integer.**See Also:**[setElem(int, int)](http://docs.google.com/java/awt/image/DataBufferShort.html#setElem(int,%20int)), [setElem(int, int, int)](http://docs.google.com/java/awt/image/DataBufferShort.html#setElem(int,%20int,%20int))

### getElem

public int **getElem**(int bank,  
 int i)

Returns the requested data array element from the specified bank.

**Specified by:**[getElem](http://docs.google.com/java/awt/image/DataBuffer.html#getElem(int,%20int)) in class [DataBuffer](http://docs.google.com/java/awt/image/DataBuffer.html) **Parameters:**bank - The bank from which you want to get a data array element.i - The data array element you want to get. **Returns:**The requested data array element as an integer.**See Also:**[setElem(int, int)](http://docs.google.com/java/awt/image/DataBufferShort.html#setElem(int,%20int)), [setElem(int, int, int)](http://docs.google.com/java/awt/image/DataBufferShort.html#setElem(int,%20int,%20int))

### setElem

public void **setElem**(int i,  
 int val)

Sets the requested data array element in the first (default) bank to the specified value.

**Overrides:**[setElem](http://docs.google.com/java/awt/image/DataBuffer.html#setElem(int,%20int)) in class [DataBuffer](http://docs.google.com/java/awt/image/DataBuffer.html) **Parameters:**i - The data array element you want to set.val - The integer value to which you want to set the data array element.**See Also:**[getElem(int)](http://docs.google.com/java/awt/image/DataBufferShort.html#getElem(int)), [getElem(int, int)](http://docs.google.com/java/awt/image/DataBufferShort.html#getElem(int,%20int))

### setElem

public void **setElem**(int bank,  
 int i,  
 int val)

Sets the requested data array element in the specified bank from the given integer.

**Specified by:**[setElem](http://docs.google.com/java/awt/image/DataBuffer.html#setElem(int,%20int,%20int)) in class [DataBuffer](http://docs.google.com/java/awt/image/DataBuffer.html) **Parameters:**bank - The bank in which you want to set the data array element.i - The data array element you want to set.val - The integer value to which you want to set the specified data array element.**See Also:**[getElem(int)](http://docs.google.com/java/awt/image/DataBufferShort.html#getElem(int)), [getElem(int, int)](http://docs.google.com/java/awt/image/DataBufferShort.html#getElem(int,%20int))

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/DataBufferShort.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/image/DataBufferInt.html)   [**NEXT CLASS**](http://docs.google.com/java/awt/image/DataBufferUShort.html) | [**FRAMES**](http://docs.google.com/index.html?java/awt/image/DataBufferShort.html)    [**NO FRAMES**](http://docs.google.com/DataBufferShort.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
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[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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