| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/ECFieldFp.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/security/spec/ECFieldF2m.html)   [**NEXT CLASS**](http://docs.google.com/java/security/spec/ECGenParameterSpec.html) | [**FRAMES**](http://docs.google.com/index.html?java/security/spec/ECFieldFp.html)    [**NO FRAMES**](http://docs.google.com/ECFieldFp.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#3dy6vkm) | [METHOD](#4d34og8) |

## **java.security.spec**

Class ECFieldFp

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 **java.security.spec.ECFieldFp**

**All Implemented Interfaces:** [ECField](http://docs.google.com/java/security/spec/ECField.html)

public class **ECFieldFp**extends [Object](http://docs.google.com/java/lang/Object.html)implements [ECField](http://docs.google.com/java/security/spec/ECField.html)

This immutable class defines an elliptic curve (EC) prime finite field.

**Since:** 1.5 **See Also:**[ECField](http://docs.google.com/java/security/spec/ECField.html)

| **Constructor Summary** | |
| --- | --- |
| [**ECFieldFp**](http://docs.google.com/java/security/spec/ECFieldFp.html#ECFieldFp(java.math.BigInteger))([BigInteger](http://docs.google.com/java/math/BigInteger.html) p)            Creates an elliptic curve prime finite field with the specified prime p. |

| **Method Summary** | |
| --- | --- |
| boolean | [**equals**](http://docs.google.com/java/security/spec/ECFieldFp.html#equals(java.lang.Object))([Object](http://docs.google.com/java/lang/Object.html) obj)            Compares this prime finite field for equality with the specified object. |
| int | [**getFieldSize**](http://docs.google.com/java/security/spec/ECFieldFp.html#getFieldSize())()            Returns the field size in bits which is size of prime p for this prime finite field. |
| [BigInteger](http://docs.google.com/java/math/BigInteger.html) | [**getP**](http://docs.google.com/java/security/spec/ECFieldFp.html#getP())()            Returns the prime p of this prime finite field. |
| int | [**hashCode**](http://docs.google.com/java/security/spec/ECFieldFp.html#hashCode())()            Returns a hash code value for this prime finite field. |

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

### ECFieldFp

public **ECFieldFp**([BigInteger](http://docs.google.com/java/math/BigInteger.html) p)

Creates an elliptic curve prime finite field with the specified prime p.

**Parameters:**p - the prime. **Throws:** [NullPointerException](http://docs.google.com/java/lang/NullPointerException.html) - if p is null. [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - if p is not positive.

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

### getFieldSize

public int **getFieldSize**()

Returns the field size in bits which is size of prime p for this prime finite field.

**Specified by:**[getFieldSize](http://docs.google.com/java/security/spec/ECField.html#getFieldSize()) in interface [ECField](http://docs.google.com/java/security/spec/ECField.html) **Returns:**the field size in bits.

### getP

public [BigInteger](http://docs.google.com/java/math/BigInteger.html) **getP**()

Returns the prime p of this prime finite field.

**Returns:**the prime.

### equals

public boolean **equals**([Object](http://docs.google.com/java/lang/Object.html) obj)

Compares this prime finite field for equality with the specified object.

**Overrides:**[equals](http://docs.google.com/java/lang/Object.html#equals(java.lang.Object)) in class [Object](http://docs.google.com/java/lang/Object.html) **Parameters:**obj - the object to be compared. **Returns:**true if obj is an instance of ECFieldFp and the prime value match, false otherwise.**See Also:**[Object.hashCode()](http://docs.google.com/java/lang/Object.html#hashCode()), [Hashtable](http://docs.google.com/java/util/Hashtable.html)

### hashCode

public int **hashCode**()

Returns a hash code value for this prime finite field.

**Overrides:**[hashCode](http://docs.google.com/java/lang/Object.html#hashCode()) in class [Object](http://docs.google.com/java/lang/Object.html) **Returns:**a hash code value.**See Also:**[Object.equals(java.lang.Object)](http://docs.google.com/java/lang/Object.html#equals(java.lang.Object)), [Hashtable](http://docs.google.com/java/util/Hashtable.html)

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/ECFieldFp.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/security/spec/ECFieldF2m.html)   [**NEXT CLASS**](http://docs.google.com/java/security/spec/ECGenParameterSpec.html) | [**FRAMES**](http://docs.google.com/index.html?java/security/spec/ECFieldFp.html)    [**NO FRAMES**](http://docs.google.com/ECFieldFp.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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