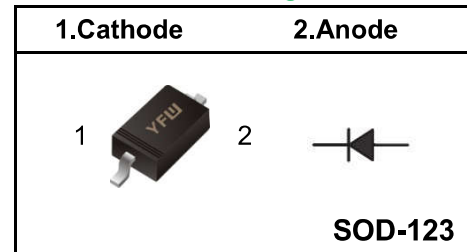


**Small Signal Schottky Diode**

**FEATURES**

- ◆Case: SOD-123
- ◆Epoxy meets UL-94 V-0 flammability rating and halogen free
- ◆Moisture Sensitivity Level 1
- ◆High temperature soldering guaranteed 260°C/10seconds at terminals
- ◆Low Reverse Current
- ◆Low Stored Charge, Majority Carrier Conduction
- ◆Low Power Loss/High Efficiency

**Pinning**



**Marking Code**

<b>BAT43W</b>	<b>S8</b>
	<b>PY</b>

**Absolute Maximum Ratings (Ta=25°C unless otherwise noted)**

Parameter	Symbol	Value	Unit
Maximum repetitive peak reverse voltage	<b>V<sub>R</sub>RM</b>	30	<b>V</b>
Average forward current	<b>I<sub>F</sub>AV</b>	0.2	<b>A</b>
Peak forward surge current(tp=8.3ms)	<b>I<sub>F</sub>SM</b>	2	<b>A</b>
Power Dissipation	<b>P<sub>D</sub></b>	500	<b>mW</b>
Typical thermal resistance	<b>R<sub>θ</sub>JA</b>	250	<b>°C/W</b>
Junction temperature	<b>T<sub>j</sub></b>	-55-+125	<b>°C</b>
Storage temperature range	<b>T<sub>STG</sub></b>	-55-+150	<b>°C</b>

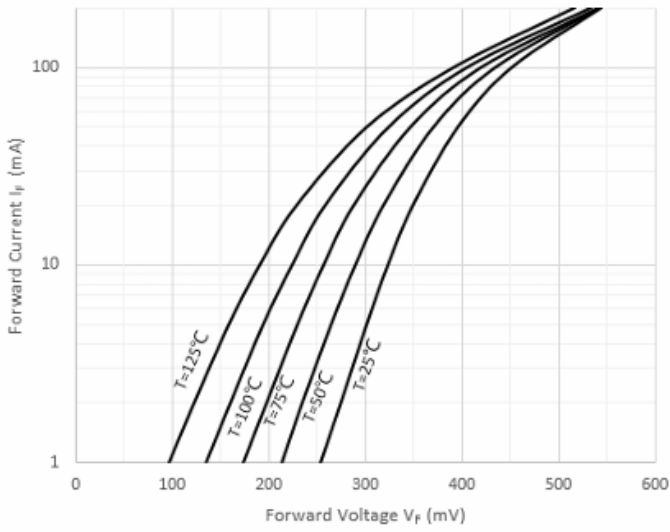
Note:1. Device mounted on an FR4 Printed-Circuit Board (PCB), single-side copper, tin-plated and standard footprint.

**Electrical Characteristics (T<sub>J</sub>=25°C,unless otherwise noted)**

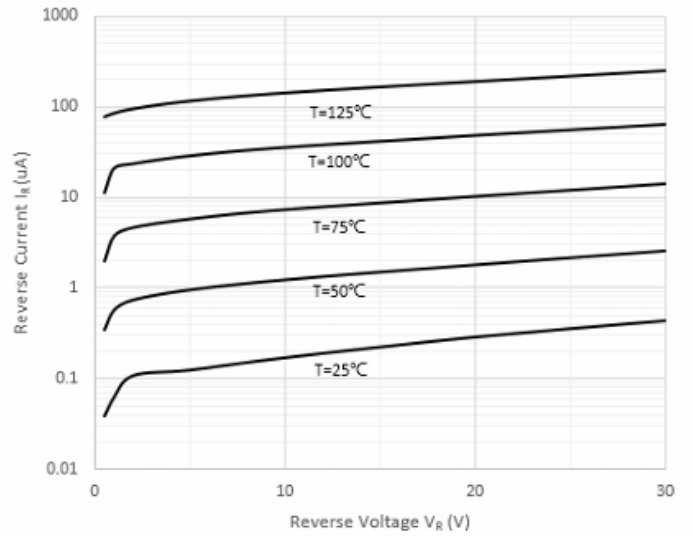
Parameter	Symbols	Test Condition	Limits			Unit
			Min	Typ	Max	
Maximum forward voltage	<b>V<sub>F1</sub></b>	I <sub>F</sub> = 2mA		0.27	0.33	<b>V</b>
	<b>V<sub>F2</sub></b>	I <sub>F</sub> = 15mA		0.34	0.45	<b>V</b>
	<b>V<sub>F3</sub></b>	I <sub>F</sub> = 200mA		0.54	1	<b>V</b>
Reverse Current	<b>I<sub>R</sub></b>	V <sub>R</sub> =25V			0.5	<b>uA</b>
Maximum reverse current	<b>V<sub>R</sub></b>	I <sub>R</sub> =10uA	30			<b>V</b>
Diode capacitance	<b>C<sub>D</sub></b>	V <sub>R</sub> = 1.0V, f = 1MHz			20	<b>PF</b>

**Ratings And Characteristic Curves**

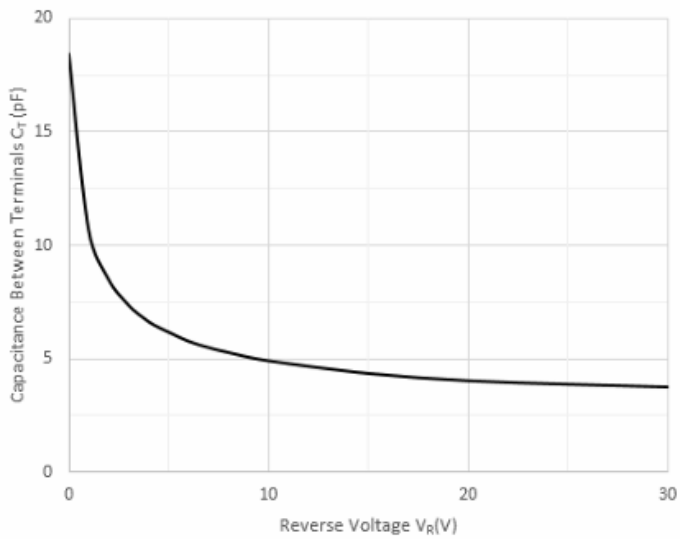
Forward Characteristics



Reverse Characteristics



Capacitance Characteristics



**Ordering information**

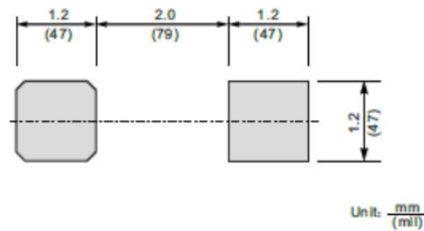
Package	Packing Description	Packing Quantity
SOD-123	Tape/Reel, 7" reel	3000PCS/Reel 120000PCS/Carton

**Package Dimensions**

**SOD-123**

Dim.	Millimeter(mm)		mil	
	Min.	Max.	Min.	Max.
A	0.9	1.3	35	51
C	0.09	0.22	3.5	8.7
D	1.5	1.8	59	71
E	2.5	2.8	98	110
E1	3.6	3.9	142	154
b	0.5	0.7	20	28
L1	0.25	0.45	10	18
A1	-	0.2	-	8
∠	9°			

**The recommended mounting pad size**



## Disclaimer

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