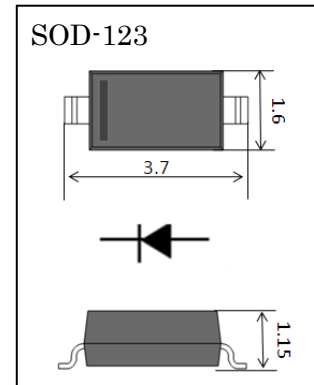


### Absolute Maximum Ratings T<sub>A</sub> = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
P <sub>D</sub>	Power Dissipation	400	mW
T <sub>STG</sub>	Storage Temperature Range	-65 to +125	°C
T <sub>J</sub>	Operating Junction Temperature	+125	°C
V <sub>RRM</sub>	Repetitive Peak Reverse Voltage	30	V
V <sub>R</sub>	Maximum DC Blocking Voltage	30	V
I <sub>F(AV)</sub>	Average Forward Rectified Current	200	mA
I <sub>FSM</sub>	Peak Forward Surge Current	4	A

These ratings are limiting values above which the serviceability of the diode may be impaired.



### Specification Features:

- Low Forward Voltage Drop
- Flat Lead SOD-123 Small Outline Plastic Package
- Surface Device Type Mounting
- RoHS Compliant
- Green EMC
- Matte Tin(Sn) Lead Finish
- Band Indicates Cathode
- Compliant to Halogen - free

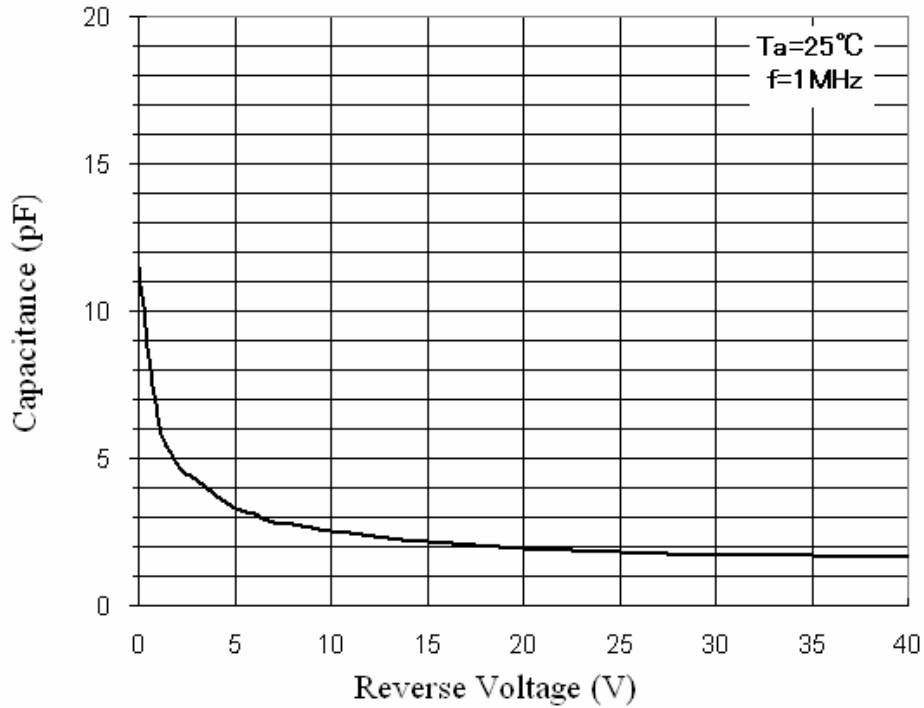
Device Marking Code	
BAT42W	S7
BAT43W	S8

### Electrical Characteristics T<sub>A</sub> = 25°C unless otherwise noted

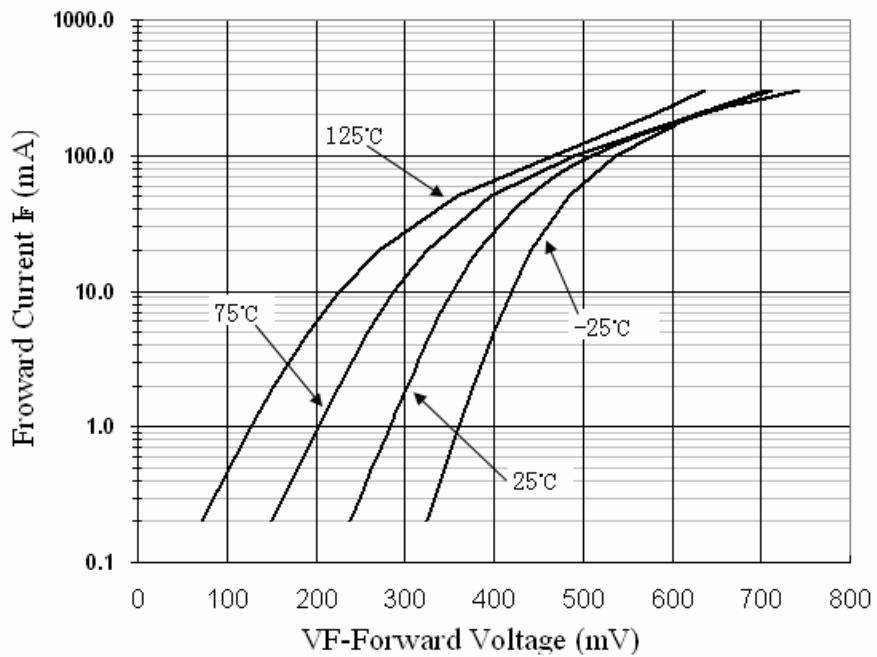
Symbol	Parameter	Test Condition	Limits		Unit
			Min	Max	
B <sub>V</sub>	Breakdown Voltage	I <sub>R</sub> =100μA	30		Volts
I <sub>R</sub>	Reverse Leakage Current	V <sub>R</sub> =25V		500	nA
V <sub>F</sub>	Forward Voltage	BAT42W I <sub>F</sub> =10mA	0.26	0.40	Volts
		I <sub>F</sub> =50mA		0.65	
		BAT43W I <sub>F</sub> =2mA		0.33	
		I <sub>F</sub> =15mA		0.45	
	BAT42W, BAT43W I <sub>F</sub> =200mA		1.0		
T <sub>RR</sub>	Reverse Recovery Time	I <sub>F</sub> =I <sub>R</sub> =10mA R <sub>L</sub> =100Ω I <sub>RR</sub> =1mA	5 (Typical)		nS
C	Capacitance	V <sub>R</sub> =1V, f=1MHz	7 (Typical)		pF

## Typical Performance Characteristics

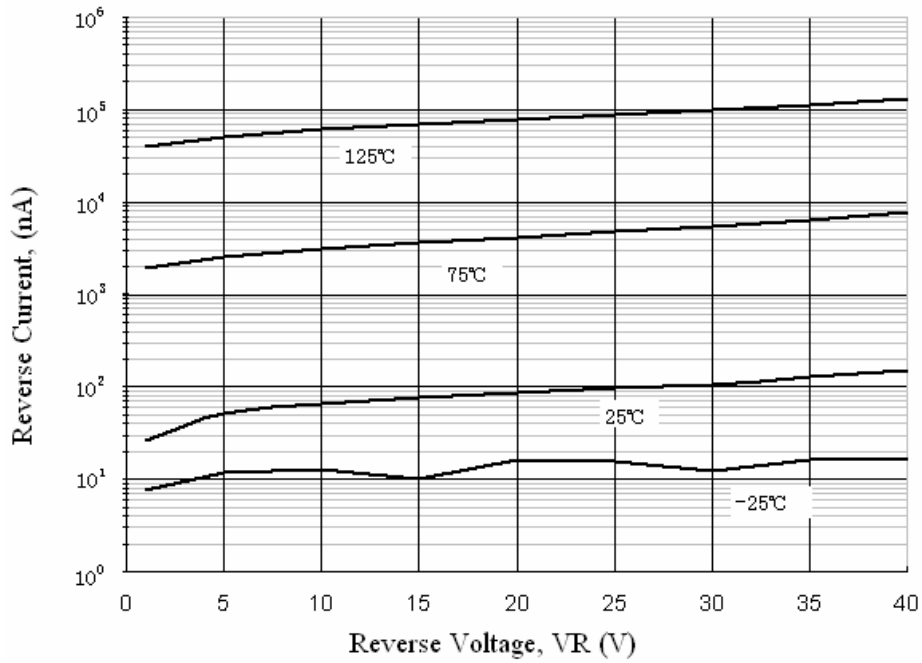
**Total Capacitance**



**Forward Voltage vs Ambient Temperature**



### Reverse Current vs Reverse Voltage



### Package Dimensions

