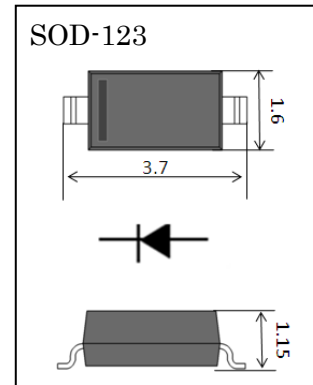


Absolute Maximum Ratings T_A = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
P _D	Power Dissipation	400	mW
T _{STG}	Storage Temperature Range	-65 to +125	°C
T _J	Operating Junction Temperature	+125	°C
V _{RRM}	Repetitive Peak Reverse Voltage	30	V
V _R	Maximum DC Blocking Voltage	30	V
I _{F(AV)}	Average Forward Rectified Current	200	mA
I _{FSM}	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
- Suffix "-Q1" for AEC-Q101

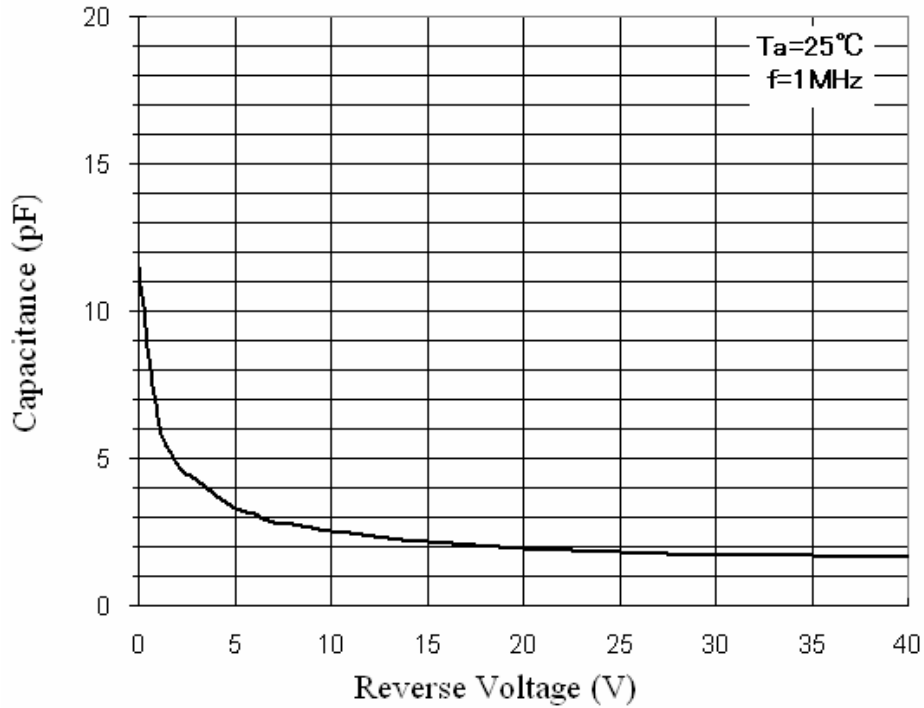
Device Marking Code	
BAT42W-Q1	S7
BAT43W-Q1	S8

Electrical Characteristics T_A = 25°C unless otherwise noted

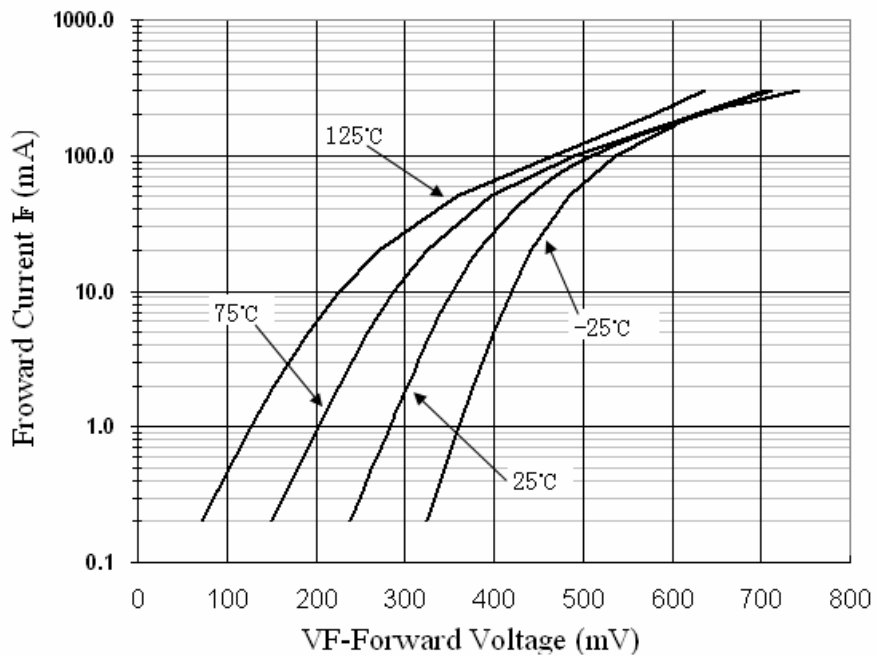
Symbol	Parameter	Test Condition	Limits		Unit
			Min	Max	
B _V	Breakdown Voltage	I _R =100μA	30		Volts
I _R	Reverse Leakage Current	V _R =25V		500	nA
V _F	Forward Voltage	BAT42W-Q1 I _F =10mA	0.26	0.40	Volts
		I _F =50mA		0.65	
		BAT43W-Q1 I _F =2mA		0.33	
		I _F =15mA		0.45	
		BAT42W-Q1, BAT43W-Q1 I _F =200mA		1.0	
T _{RR}	Reverse Recovery Time	I _F =I _R =10mA R _L =100Ω I _{RR} =1mA	5 (Typical)		nS
C	Capacitance	V _R =1V, f=1MHz	7 (Typical)		pF

Typical Performance Characteristics

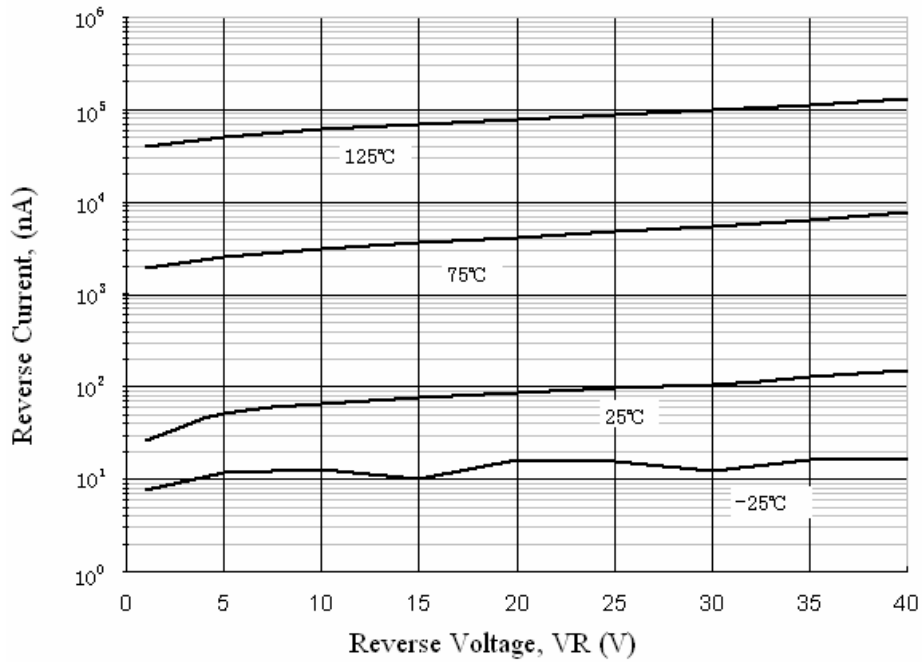
Total Capacitance



Forward Voltage vs Ambient Temperature



Reverse Current vs Reverse Voltage



Package Dimensions

