

BAT42 / BAT43

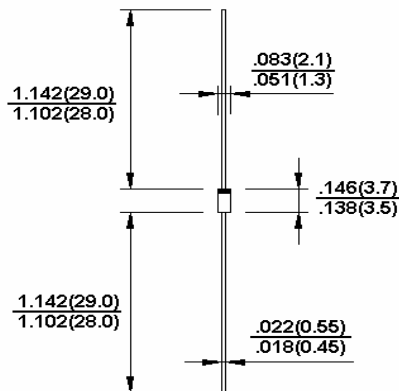
200 mW Hermetically Sealed Glass Fast Switching Schottky Barrier Diode

DO-35



Features

- ✧ Low forward voltage drop
- ✧ DO-35 package (JEDEC)
- ✧ Through-hole device type mounting
- ✧ Hermetically sealed glass
- ✧ Compression bonded construction
- ✧ All external surface are corrosion resistant and leads are readily solderable
- ✧ RoHS compliant
- ✧ Solder hot dip Tin(Sn) lead finish



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Maximum Ratings

Type Number	Symbol	BAT42/BAT43	Units
Power Dissipation	P _d	200	mW
Repetitive Peak Reverse Voltage	V _{RRM}	30	V
Maximum DC Blocking Voltage	V _R	30	V
Average Forward Rectified Current	I _{F(AV)}	200	mA
Peak Forward Surge Current	I _{FSM}	4.0	A
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to + 125	°C

Electrical Characteristics

Type Number	Symbol	Min	Max	Units
Breakdown Voltage @ I _R =100uA	B _V	30		V
Forward Voltage Drop All Types	V _F			V
BAT42 IF=200mA			1.0	
BAT42 IF=10mA			0.40	
BAT42 IF= 50mA			0.65	
BAT43 IF=200mA			1.0	
BAT43 IF =2.0mA		0.26	0.33	
BAT43 IF=15mA			0.45	
Maximum Peak Reverse Current VR=25V	I _R		500	nA
Junction Capacitance VR=1V, f=1.0MHz	C _j		7(Typ.)	pF
Reverse Recovery Time (Note 1)	t _{rr}		5.0 (Typ.)	nS

Note: 1. Reverse Recovery Test Conditions: I_F=I_R=10mA, I_{RR}=1mA, R_L=100Ω.

RATINGS AND CHARACTERISTIC CURVES (BAT42 /BAT43)

Fig. 1 – Admissible Power Dissipation vs. Ambient Temperature

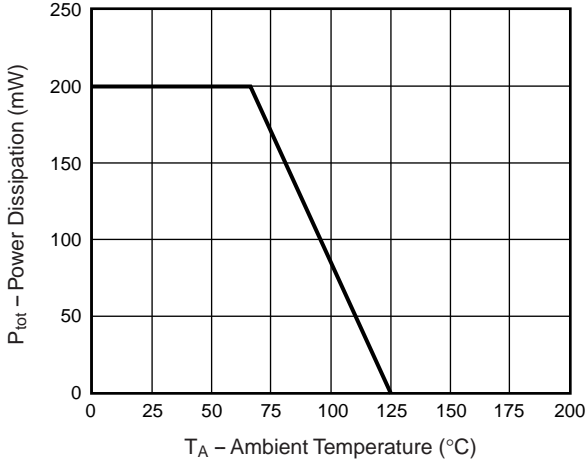


Fig. 2 – Typical Reverse Characteristics

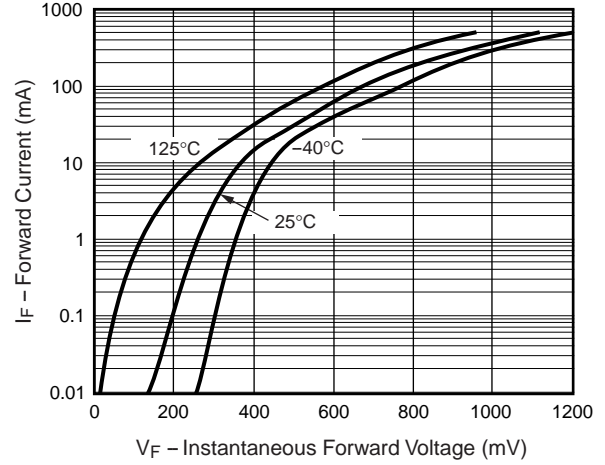


Fig. 3 – Typical Reverse Characteristics

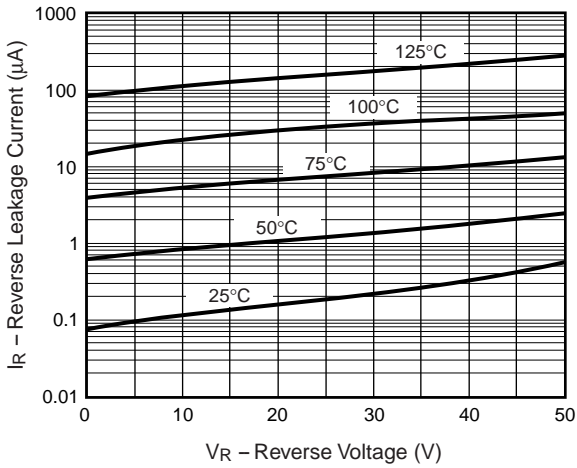


Fig. 4 – Typical Capacitance vs. Reverse Applied Voltage

