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BAS85

200mW
Small Signal Schottky Barrier Diodes
30 Volts

Features

- Moisture Sensitivity Level 1
- This diode features low turn-on voltage
- The devices are protected by a PN junction guard ring against excessive voltage, such as electrostatic discharges
- This diode is also available in a DO-35 case with type designation BAT85
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)

Maximum Ratings

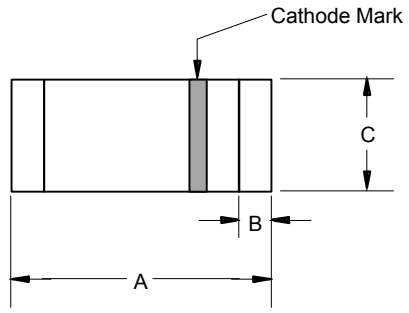
Symbol	Rating	Rating	Unit
$_R$	Continuous Reverse Voltage	30	V
I_F	Forward DC Current at Tamb=25℃	200(2)	mA
I_{FM}	Repetitive Peak Forward Current T_{amb}=25℃	300(2)	mA
I_{FSM}	Surge Forward Current at tp<1s, T_{amb}=25℃	600(2)	mA
P_{tot}	Power Dissipation at Tamb=65℃	200(2)	mW
R_{JA}	Thermal Resistance Junction to Ambient Air	430(2)	℃/W
T_J	Junction Temperature	125	℃
T_{STG}	Storage Temperature	-55 to +150	℃

Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Typ	Max	Units
$V_{(BR)R}$	Reverse Breakdown Voltage (I_R=10μAdc Pulsed)	30	---	---	V
V_F	Forward Voltage I_F=0.1mA, Pulse test t_p<300 μ s I_F=1.0mA, Pulse test t_p<300 μ s I_F=10mA, Pulse test t_p<300 μ s I_F=30mA, Pulse test t_p<300 μ s I_F=100mA, Pulse test t_p<300 μ s	 --- --- --- --- ---	 --- --- --- 0.5 ---	 0.24 0.32 0.40 --- 0.80	V
I_R	Leakage Current (3) (V_R=25Vdc)	---	0.2	2.0	μA
C_{tot}	Capacitance (V_R=1.0V, f=1.0MHz)	---	---	10	pF
t_{rr}	Reverse Recovery Time (I_F=10mA, I_R=10mA, Irr=1.0mA)	---	---	5.0	ns

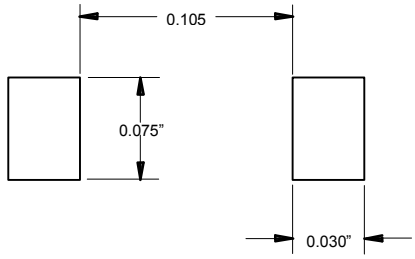
Notes:1. Lead in Glass Exemption Applied, see EU Directive Annex 5.
2. Valid provided that electrodes are kept at ambient temperature

MINIMELF



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	.130	.146	3.30	3.70	
B	.008	.016	.20	.40	
C	.055	.059	1.40	1.50	∅

SUGGESTED SOLDER PAD LAYOUT



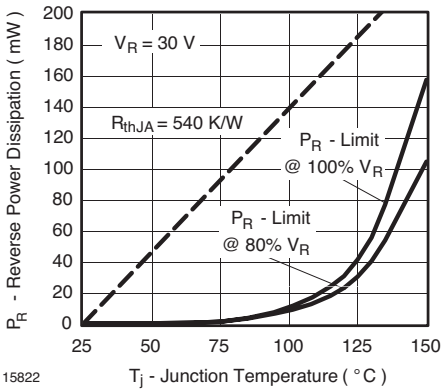


Figure 1. Max. Reverse Power Dissipation vs. Junction Temperature

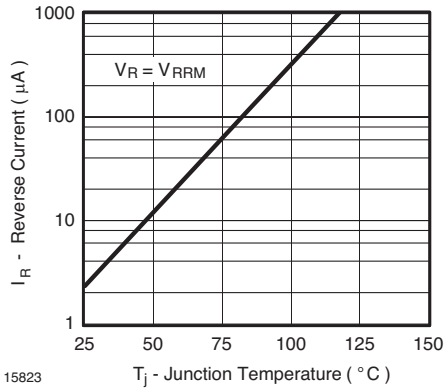


Figure 2. Reverse Current vs. Junction Temperature

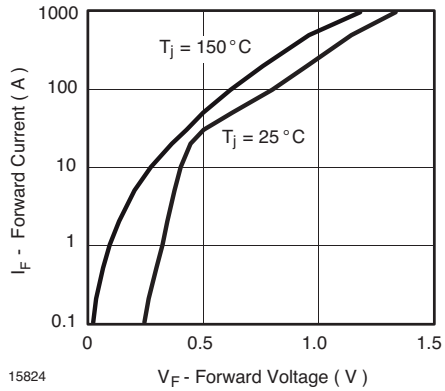


Figure 3. Forward Current vs. Forward Voltage

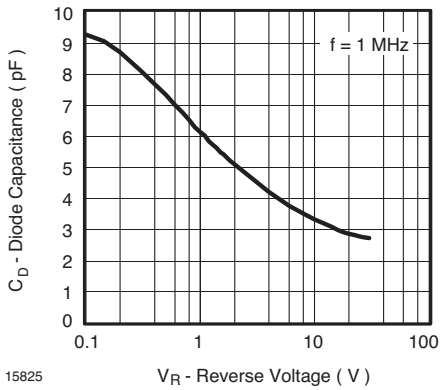


Figure 4. Diode Capacitance vs. Reverse Voltage