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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

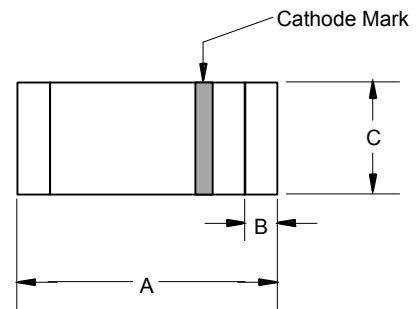
Symbol	Rating	Rating	Unit
V_R	Continuous Reverse Voltage	30	V
I_F	Forward DC Current at $T_{amb}=25^\circ\text{C}$	200 ⁽²⁾	mA
I_{FM}	Repetitive Peak Forward Current $T_{amb}=25^\circ\text{C}$	300 ⁽²⁾	mA
I_{FSM}	Surge Forward Current at $t_p < 1\text{s}$, $T_{amb}=25^\circ\text{C}$	600 ⁽²⁾	mA
P_{tot}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

Electrical Characteristics @ 25°C Unless Otherwise Specified

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

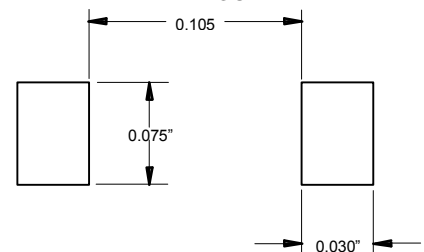
Notes:1. Lead in Glass Exemption Applied, see EU Directive Annex 5.
2. Valid provided that electrodes are kept at ambient temperature

MINIMELF



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

SUGGESTED SOLDER PAD LAYOUT



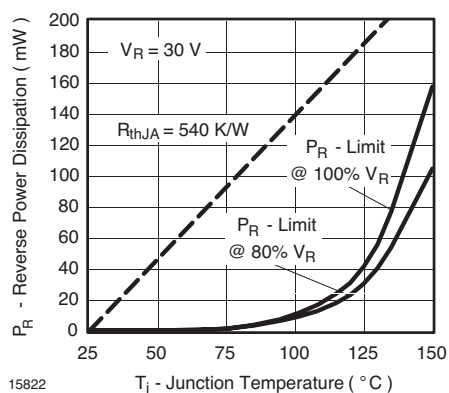


Figure 1. Max. Reverse Power Dissipation vs. Junction Temperature

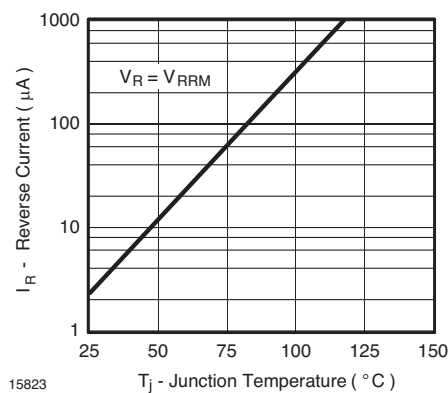


Figure 2. Reverse Current vs. Junction Temperature

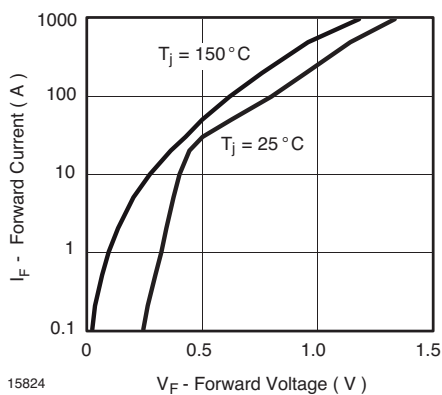


Figure 3. Forward Current vs. Forward Voltage

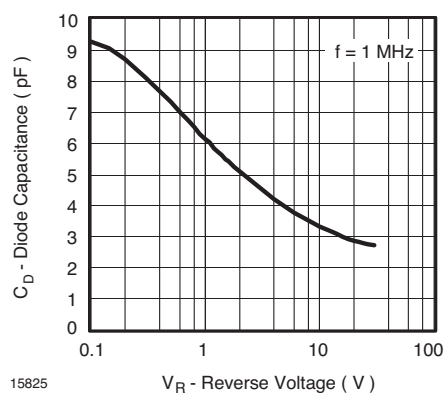


Figure 4. Diode Capacitance vs. Reverse Voltage