PANJIT SEMI CONDUCTOR

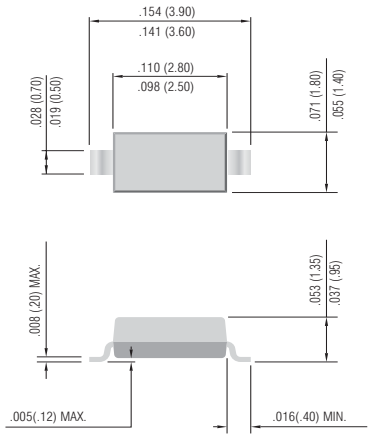
DATA SHEET

BAT42W~BAT43W

SURFACE MOUNT SCHOTTKY BARRIER

VOLTAGE 30 Volts **CURRENT** 0.20 Amperes

SOD-123 Unit: inch (mm)



FEATURES

- Low turn-on voltage
- Fast switching
- PN Junction Guard Ring for Transient and ESD Protection.

MECHANICAL DATA

Case: SOD-123, Plastic

Terminals: Solderable per MIL-STD-202, Method 208

Polarity: See Diagram Below

Approx. Weight: 0.008 gram

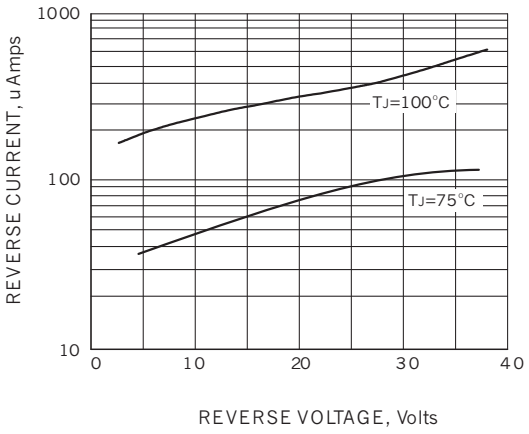
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

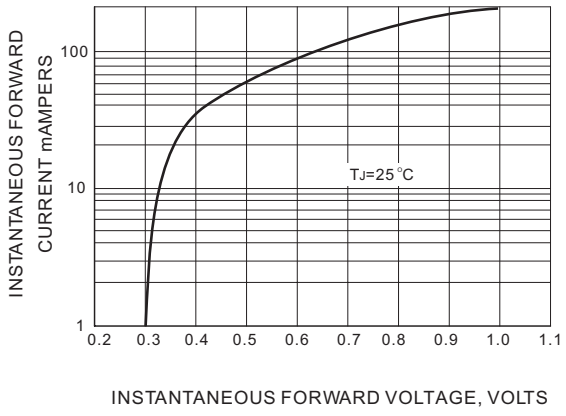
Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

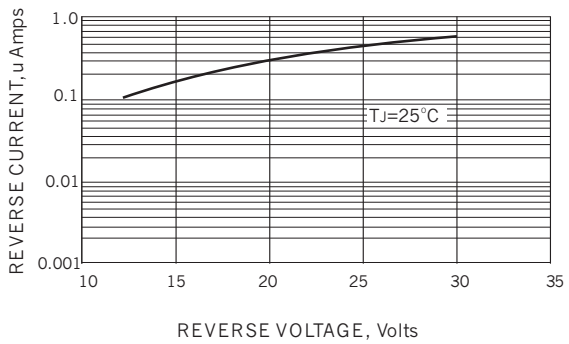
Parameter	Symbol	BAT42W	BAT43W	Units
Marking Code		L2	L3	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	30		V
Maximum RMS Voltage	V_{RMS}	21		V
Maximum DC Blocking Voltage	V_{DC}	30		V
Maximum Average Forward Current at Ta=75°C	I_{AV}	0.2		A
Peak Forward Surge Current, 1.0ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	4.0	4.0	A
Maximum Instantaneous Forward Voltage	V_F	0.4 / 0.01A 1.0 / 0.2A	0.33 / 0.002A 1.0 / 0.2A	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	0.5	0.5	uA
Maximum Thermal Resistance	$R\theta JL$ $R\theta JA$	250 500		°C / W
Operating Junction Temperature Range	T_J	-55 TO +125		°C
Storage Temperature Range	T_{STG}	-55 TO +125		°C



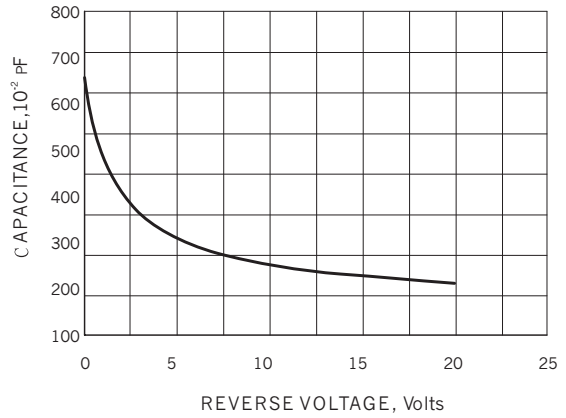
TYPICAL REVERSE CURRENT



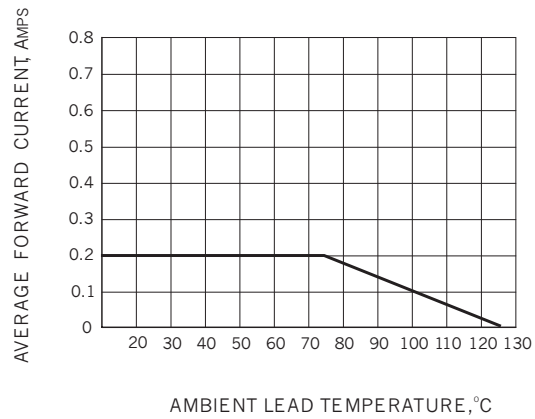
TYPICAL FORWARD VOLTAGE



TYPICAL REVERSE CURRENT



TYPICAL JUNCTION CAPACITANCE



CURRENT DERATING