



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.

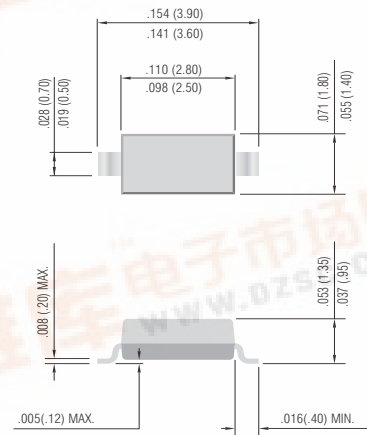
MECHANICAL DATA

Case: SOD-123, Plastic

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

Polarity: See Diagram Below

Approx. Weight: 0.008 gram



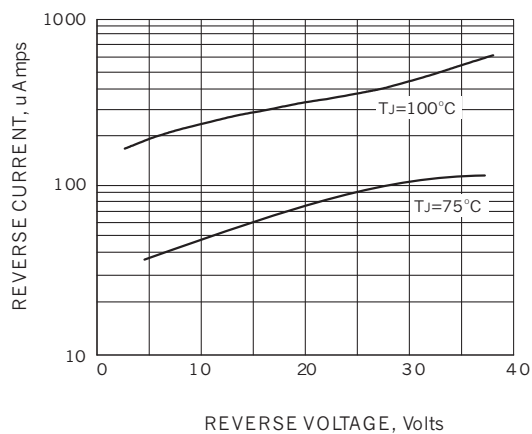
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

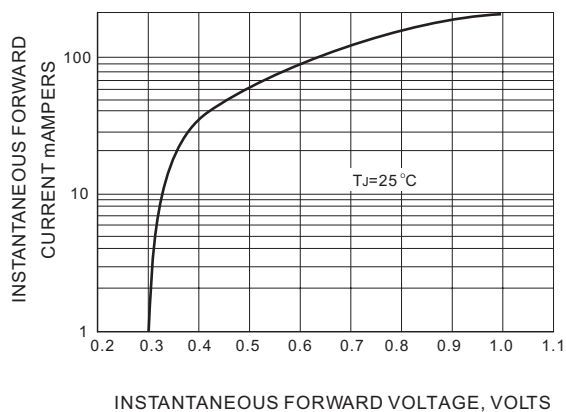
Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

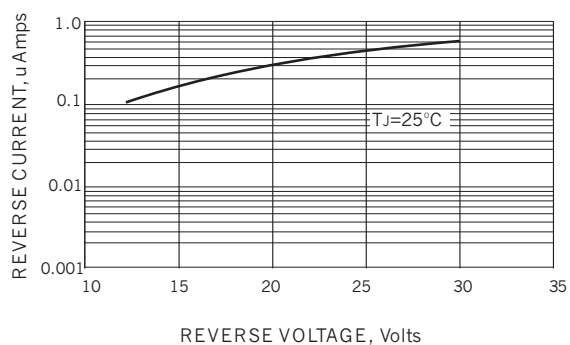
Parameter	Symbol	BAT42W	BAT43W	Units
Marking Code		L2	L3	
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	30		V
Maximum RMS Voltage	V _{RMS}	21		V
Maximum DC Blocking Voltage	V _{DC}	30		V
Maximum Average Forward Current at Ta=75°C	I _{AV}	0.2		A
Peak Forward Surge Current, 1.0ms single half sine-wave 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 _{θJL} R _{θJA}	250 500		°C / W
Operating Junction Temperature Range	T _J	-55 TO +125		°C
Storage Temperature Range	T _{STG}	-55 TO +125		°C



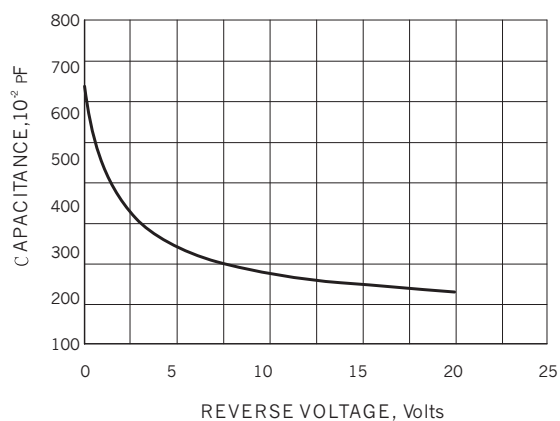
TYPICAL REVERSE CURRENT



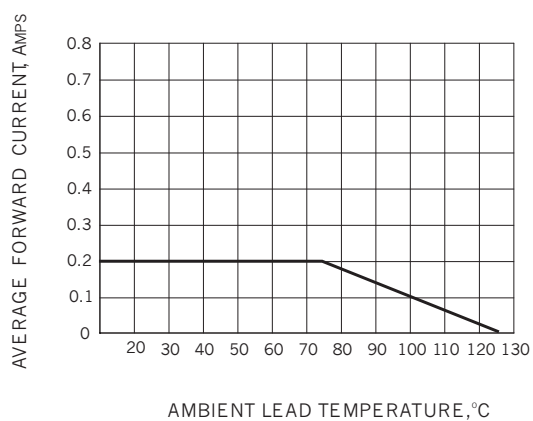
TYPICAL FORWARD VOLTAGE



TYPICAL REVERSE CURRENT



TYPICAL JUNCTION CAPACITANCE



CURRENT DERATING