

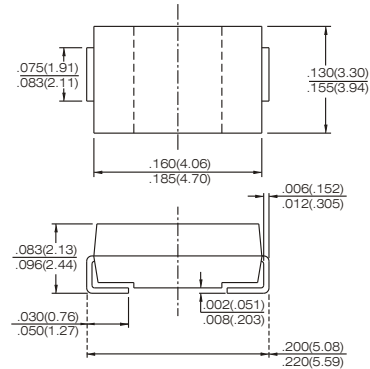
B220LB thru B240LB

LO VF SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE - 20 TO 40 VOLTS CURRENT - 2.0 AMPERES



SMB/DO-214AA



Dimensions in inches and (millimeters)

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For surface mount applications
- Low profile package
- Built-in strain relief
- Metal to silicon rectifier, majority carrier conduction
- Low power loss, high efficiency
- Easy pick and place
- High current capability, low VF
- High surge capacity
- For use in low voltage high frequency inverters, Free wheeling, and protection applications
- High temperature soldering guaranteed
- High temperature soldering : 260°C/10 seconds at terminals
- Pb free product at available : 99% Sn above meet RoHS Environment substance directive request

MECHANICAL DATA

Case : JEDEC DO-214AA molded plastic
 Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
 Polarity : Color band denotes cathode
 Standard Package : 12mm tape (EIA STD EIA-481)
 Weight : 0.003 ounce, 0.093gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified
 Resistive or inductive load

	SYMBOL	B220LB	B230LB	B240LB	UNITS
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	Volts
Maximum RMS Voltage	V_{RMS}	14	21	28	Volts
Maximum DC Blocking Voltage	V_{DC}	20	30	40	Volts
Maximum Average Forward Rectified Current at T_L (see Figure 1)	$I_{(AV)}$	2.0			Amps
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	50			Amps
Maximum Instantaneous Forward Voltage at 2.0A (Note 1)	V_F	0.38		0.4	Volts
Maximum DC Reverse Current (NOTE 1) $T_A=25^\circ\text{C}$ (Note 1) at Rated DC Blocking Voltage $T_A=100^\circ\text{C}$	I_R	0.5 20			mA
Maximum Thermal Resistance (NOTE 2)	$R_{\theta JL}$ $R_{\theta JA}$	17 75			°C / W
Operating Junction Capacitance Range	T_J	-50 to +150			°C
Storage Temperature Range	T_{STG}	-50 to +150			°C

NOTES :

1. Pulse test with $p_w=300$ sec, 1% duty cycle
2. Mounted on P.C.B. Board with 8.0mm^2 (0.13mm thick) copper pad areas

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RATING AND CHARACTERISTICS CURVES B220LB THRU B240LB

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

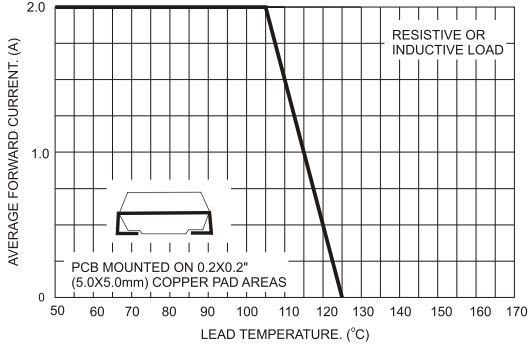


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

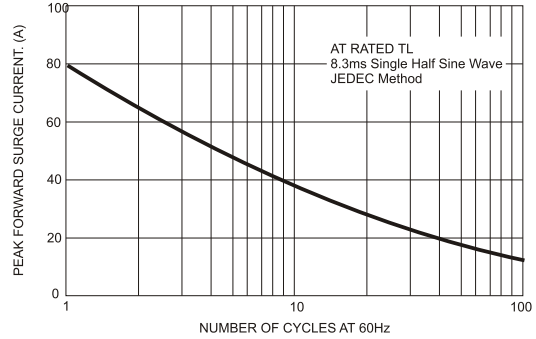


FIG.3- TYPICAL FORWARD CHARACTERISTICS

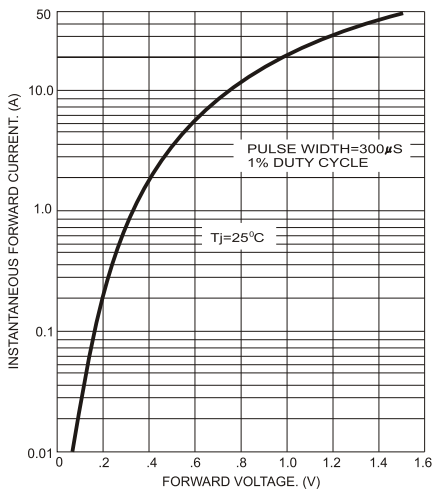


FIG.4- TYPICAL REVERSE CHARACTERISTICS

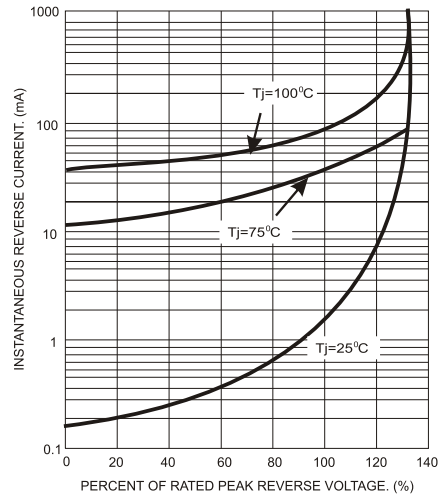


FIG.5- TYPICAL JUNCTION CAPACITANCE

