

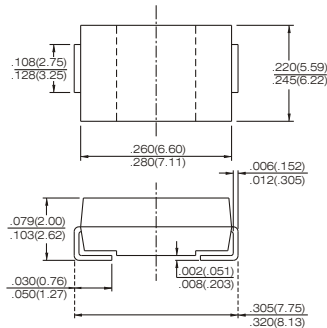
B320LC thru B340LC

LO VF SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE - 20 TO 40 VOLTS CURRENT - 3.0 AMPERES



SMC/DO-214AB



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-214AB 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 : 0.007 ounce, 0.21gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOL	B320LC	B330LC	B340LC	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)	$I_{(AV)}$	3.0			Amps
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	100			Amps
Maximum Instantaneous Forward Voltage at 3.0A (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		$^\circ\text{C} / \text{W}$
Operating Junction Capacitance Range	T_J	-50 to +150			$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-50 to +150			$^\circ\text{C}$

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

B320LC thru B340LC

LO VF SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

RATING AND CHARACTERISTICS CURVES B320LC THRU B340LC

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

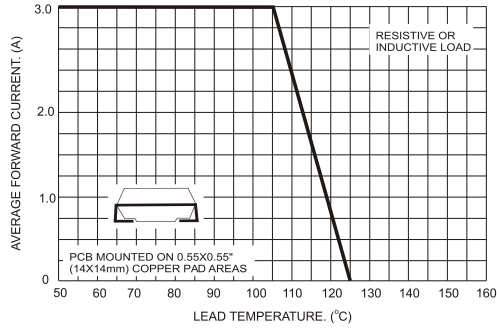


FIG.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

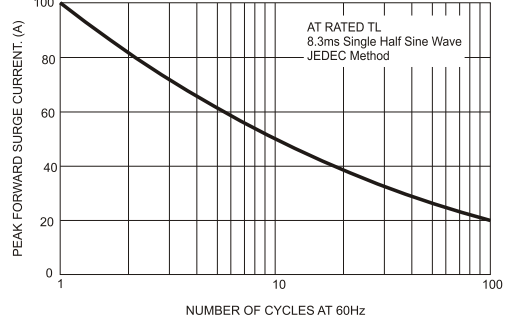


FIG.3- TYPICAL FORWARD CHARACTERISTICS

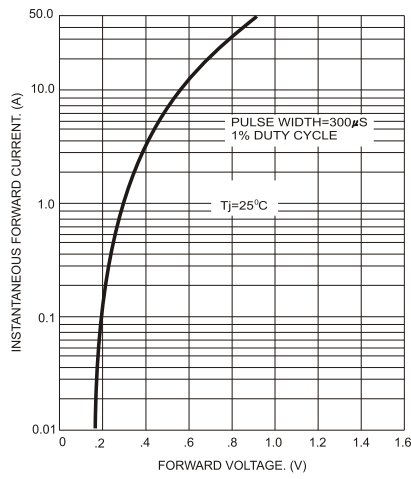


FIG.4- TYPICAL REVERSE CHARACTERISTICS

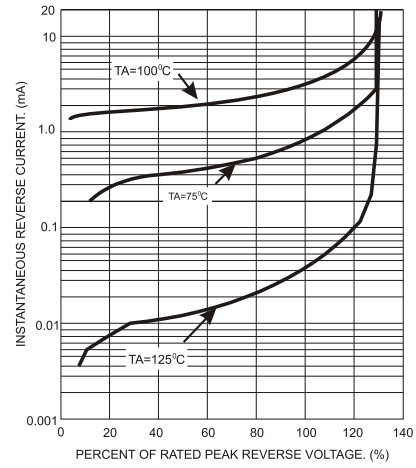


FIG.5- TYPICAL JUNCTION CAPACITANCE

