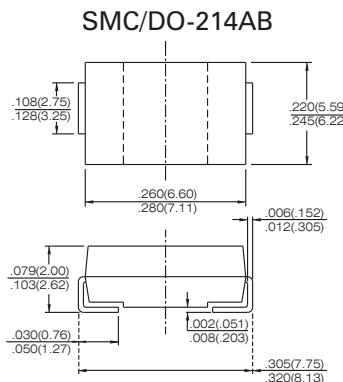


# B320LC thru B340LC

## LOW VOLTAGE SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE - 20 TO 40 VOLTS CURRENT - 3.0 AMPERES



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 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 $T_A$ (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  $pw=300$  sec, 1% duty cycle

2. Mounted on P.C.B. Board with  $8.0\text{mm}^2$  (0.13mm thick) copper pad areas

# B320LC thru B340LC

## LOW VOLTAGE SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

### RATING AND CHARACTERISTICS CURVES B320LC THRU B340LC

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

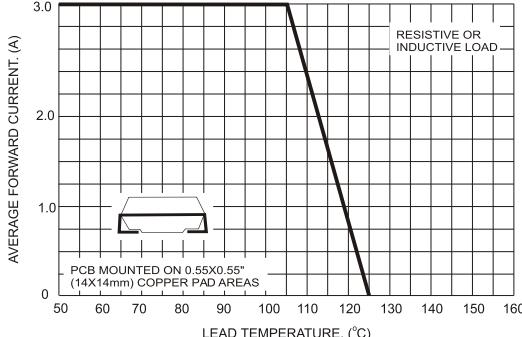


FIG.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

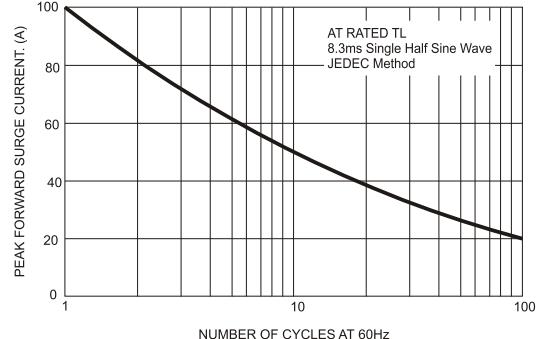


FIG.3- TYPICAL FORWARD CHARACTERISTICS

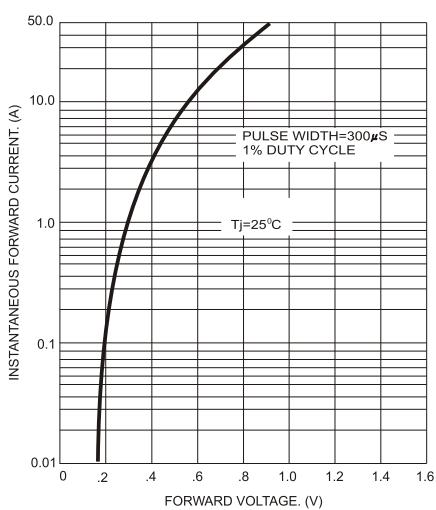


FIG.4- TYPICAL REVERSE CHARACTERISTICS

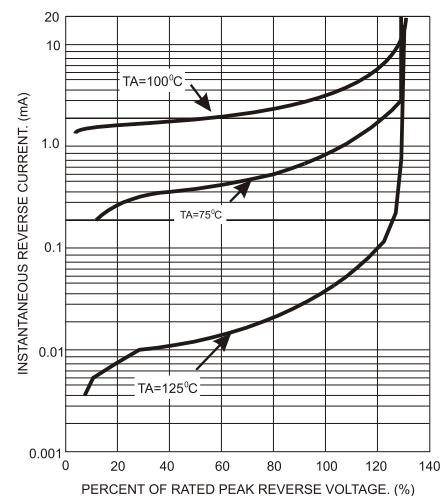


FIG.5- TYPICAL JUNCTION CAPACITANCE

