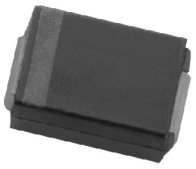
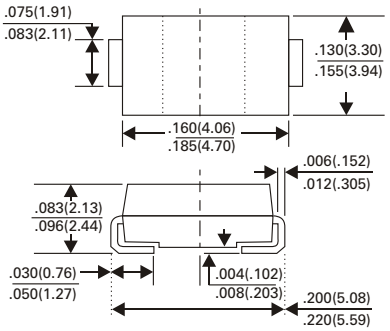
SK32B thru SK315B

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE - 20 TO 150 VOLTS CURRENT - 3.0 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
- High surge capability
- For use in low voltage high frequency inverters, free wheeling. and polarity protection applications
- High temperature soldering：260°C/10 seconds at terminsls

MECHANICAL DATA

Terminals：Solder plated, solderable per MIL-STD-750, Method 2026
Polarity：Color band denotes positive end (cathode)
Standard Package：12mm tape (EIA STD EIA-481)
Weight：0.003 ounce, 0.093gram

MAXIMUM RATIXGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOL	SK32B	SK33B	SK34B	SK35B	SK36B	SK38B	SK39B	SK310B	SK315B	UNITS
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	90	100	150	Volts
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	63	70	105	Volts
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	90	100	150	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}	80									Amps
Maximum Instantaneous Forward Voltage at 3.0A (Note 1)	V_F	0.5			0.75			0.85		0.95	Volts
Maximum DC Reverse Current (NOTE 1) T_A=25°C at Rated DC Blocking Voltage T_A=100°C	I_R	0.5 20						0.1 2.0			mA
Maximum Thermal Resistance (NOTE 2)	$R_{\theta JA}$ $R_{\theta JL}$	17 55									°C / W
Operating at Storag Temprature Range T_J	T_J	-55 to +150									°C
Storage Temperature Range	T_{STG}	-50 to +150									°C

NOTES：
1. Pulse test with pw=300 μS, 2% duty cycle
2. Mounted on P.C.B with 14mm² (0.13mm thick) copper pad areas

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

RATING AND CHARACTERISTICS CURVES SK32B THRU SK315B

FIG. 1- MAXIMUM FORWARD CURRENT DERATING CURVE

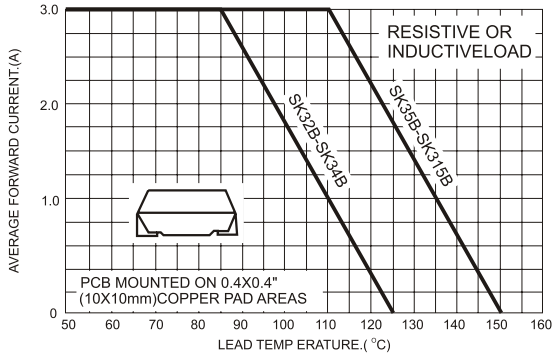


FIG. 2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

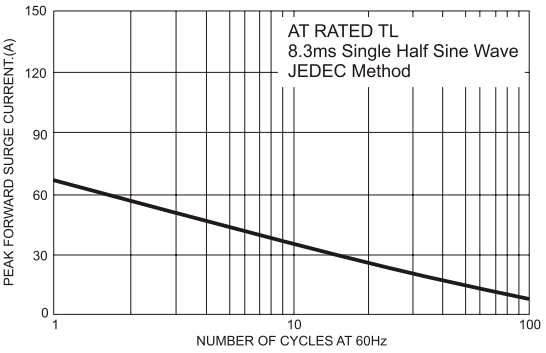


FIG. 3- TYPICAL FORWARD CHARACTERISTICS

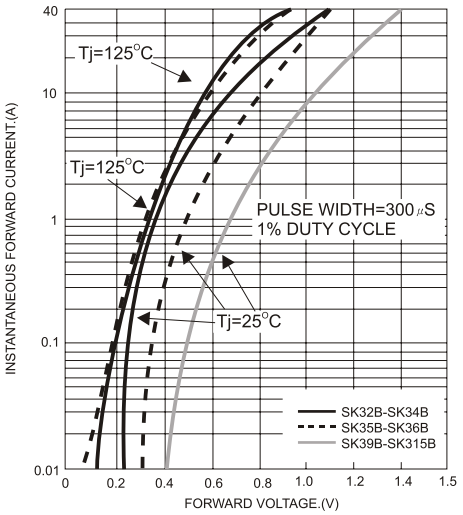


FIG. 4- TYPICAL REVERSE CHARACTERISTICS

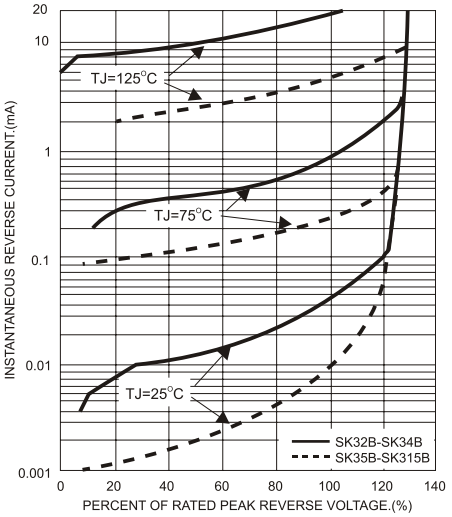


FIG. 5- TYPICAL JUNCTION CAPACITANCE

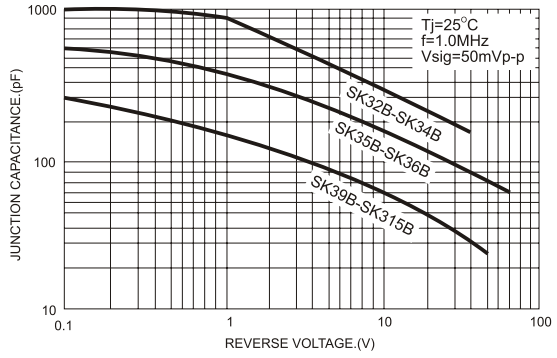


FIG.6- TYPICAL TRANSIENT THERMAL CHARACTERISTICS