

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

### VOLTAGE 20 TO 200 Volt CURRENT 3 Ampere

#### Features

- Plastic package has Underwriters Laboratory
- Flammability Classification 94V-O
- For surface mounted applications in order to optimize board space
- Low power loss, high efficiency
- High surge capacity
- Lead free in compliance with EU RoHS2.0 (2011/65/EU & 2015/865/EU directive)
- Green molding compound as per IEC61249 Std. . (Halogen Free)
- AEC-Q101 qualified (Automotive grade with suffix "Q".)
- Exsemi technology



#### Mechanical Data

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

#### Maximum Ratings ( $T_A=25\text{ }^{\circ}\text{C}$ unless otherwise noted)

Number	SYMBOLS	SS32B	SS34B	SS36B	SS38B	SS310B	SS315B	SS320B	UNITS
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	40	60	80	100	150	200	VOLTS
Maximum RMS voltage	$V_{RMS}$	14	28	42	56	70	105	150	VOLTS
Maximum DC blocking voltage	$V_{DC}$	20	40	60	80	100	150	200	VOLTS
Maximum average forward rectified current at $T_L$ (see fig.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	$V_F$	0.55	0.75	0.85			0.95	Volts	
Maximum DC reverse current at rated DC blocking voltage	$I_R$	$T_A=25^{\circ}\text{C}$			1				uA
		$T_A=100^{\circ}\text{C}$			1500				
Typical thermal resistance (NOTE 1)	$R_{\theta JA}$	55							$^{\circ}\text{C/W}$
Operating junction temperature range	$T_J$	-50 to +150			-50 to +175				$^{\circ}\text{C}$
Storage temperature range	$T_{STG}$	-50 to +150			-50 to +175				$^{\circ}\text{C}$

Note: 1.P.C.B. mounted with 0.6"0.6" (16 mm x 16mm) cooper pad areas

FIG. 1- FORWARD CURRENT DERATING CURVE

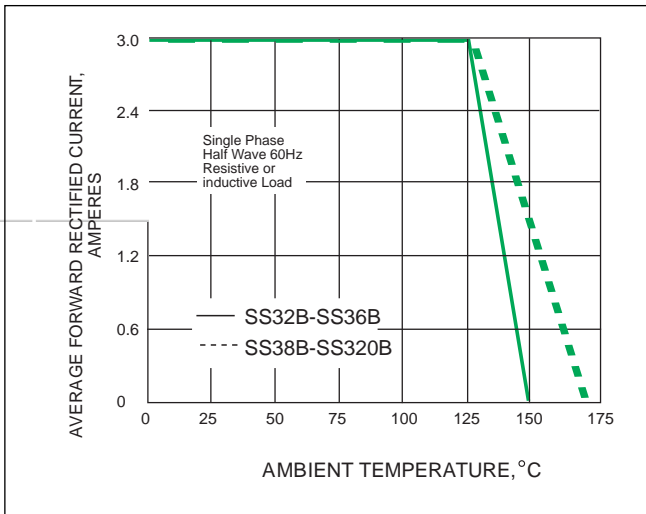


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

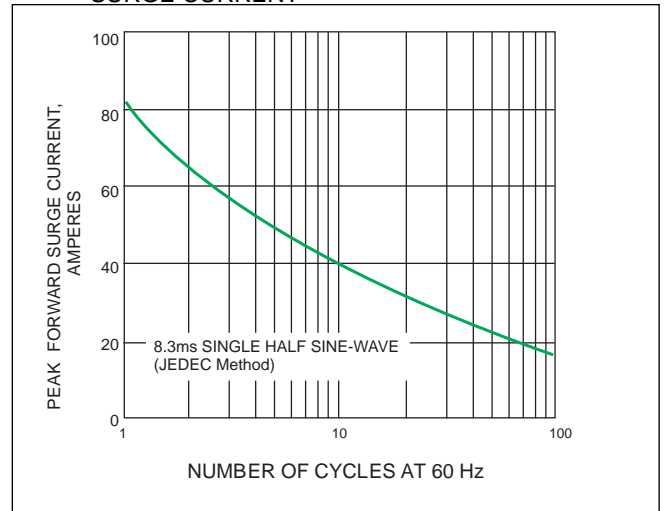


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

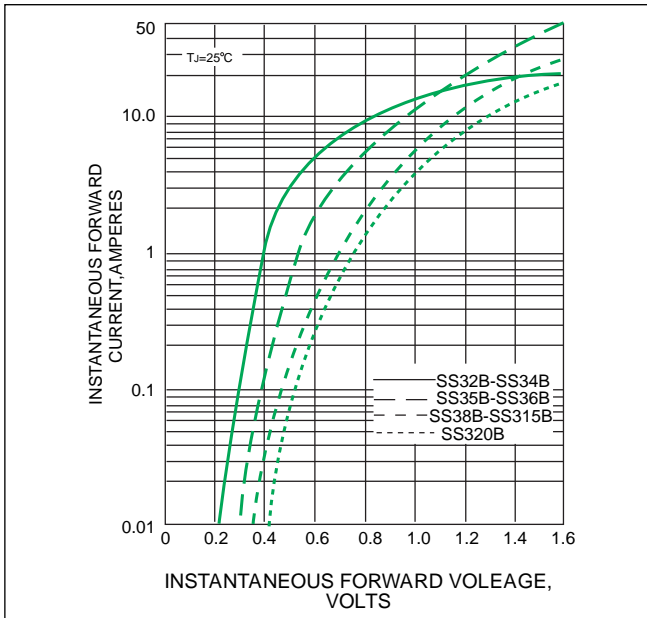


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

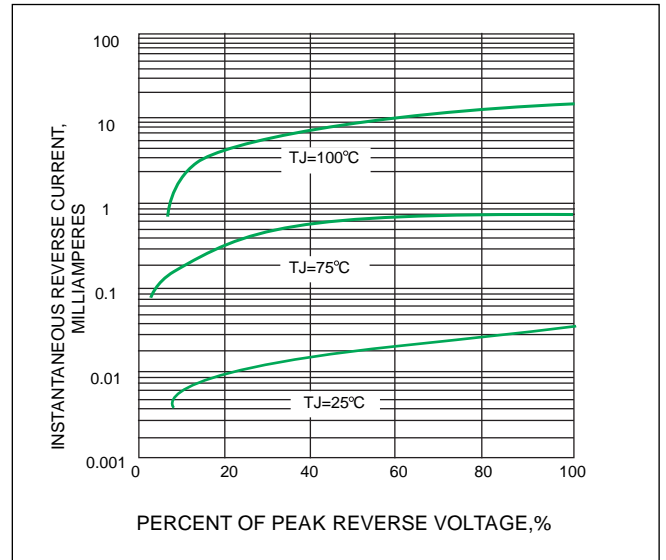


FIG. 5-TYPICAL JUNCTION CAPACITANCE

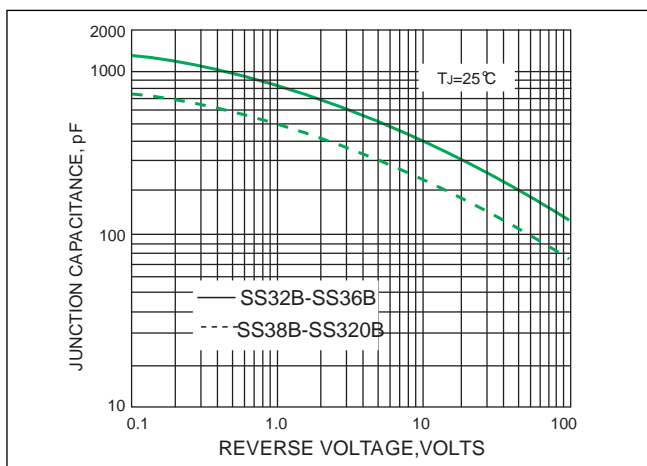
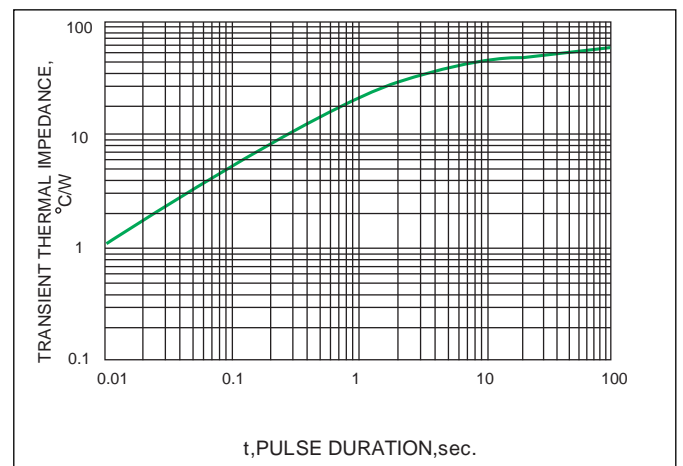
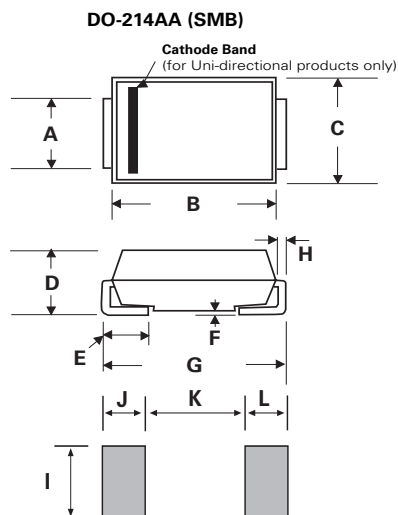


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



Dimensions

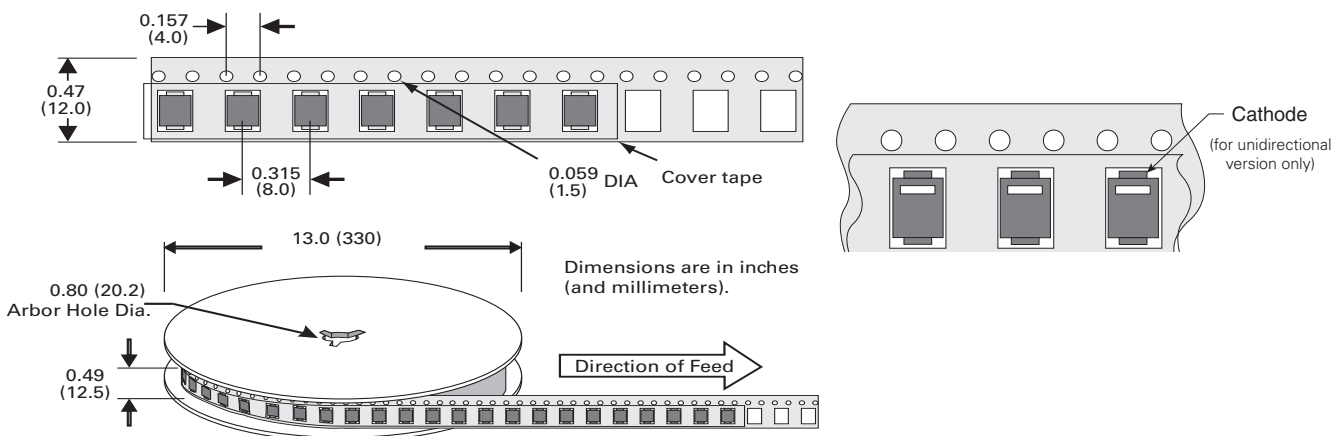


Dimensions	Inches		Millimeters	
	Min	Max	Min	Max
A	0.066	0.091	1.700	2.300
B	0.160	0.191	4.060	4.850
C	0.130	0.155	3.300	3.940
D	0.083	0.098	2.100	2.500
E	0.030	0.060	0.760	1.520
F	-	0.011	-	0.300
G	0.200	0.220	5.08	5.590
H	0.006	0.012	0.152	0.310
I	0.082	-	2.100	-
J	0.070	-	1.800	-
K	-	0.107	-	2.740
L	0.070	-	1.800	-

Ordering Information

Part number	Component Package	Quantity	Packaging Option	Packaging Specification
SS3XXB	DO-214AA	3000	Tape & Reel - 12mm tape/13" reel	EIA STD RS-481

Tape and Reel Specification



Note: Devices are packed in accordance with EIA standard RS-481-A and specification given above.