

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-214AB 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 ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Number	SYMBOLS	SS32	SS34	SS36	SS38	SS310	SS315	SS320	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}	120							Amps	
Maximum instantaneous forward voltage at 3.0A	V_F	0.55	0.60	0.75			0.95	Volts		
Maximum DC reverse current at rated DC blocking voltage	I_R	$T_A=25^{\circ}\text{C}$					10		5	uA
		$T_A=100^{\circ}\text{C}$					1000			
Typical junction capacitance (NOTE 1)	C_J	500	300					pF		
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	55.0							$^{\circ}\text{C/W}$	
Operating junction temperature range	T_J	-50 to +150							$^{\circ}\text{C}$	
Storage temperature range	T_{STG}	-50 to +150							$^{\circ}\text{C}$	

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

FIG. 1- FORWARD CURRENT DERATING CURVE

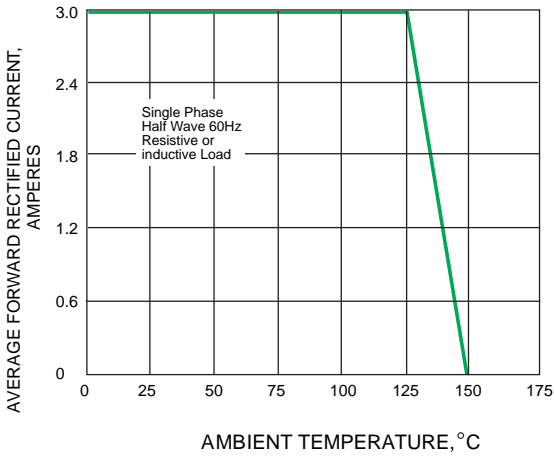


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

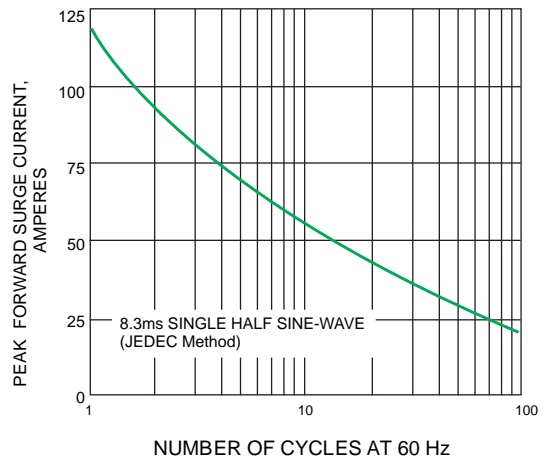


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

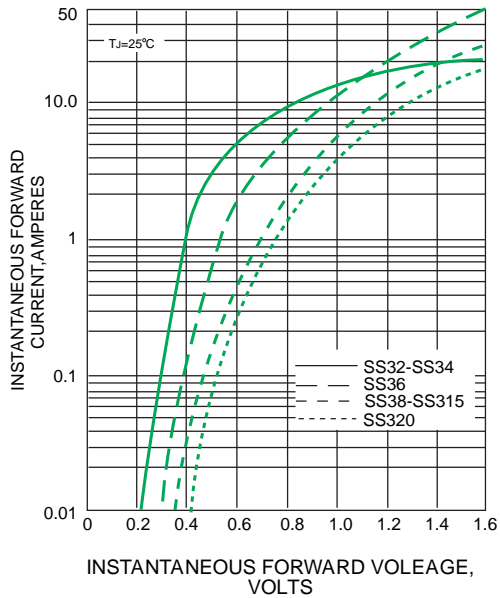


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

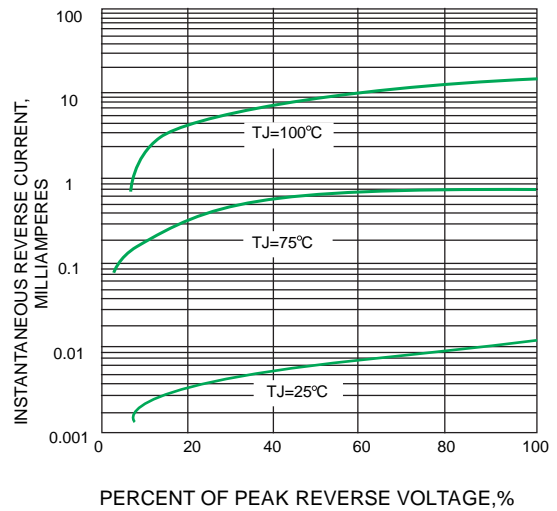


FIG. 5-TYPICAL JUNCTION CAPACITANCE

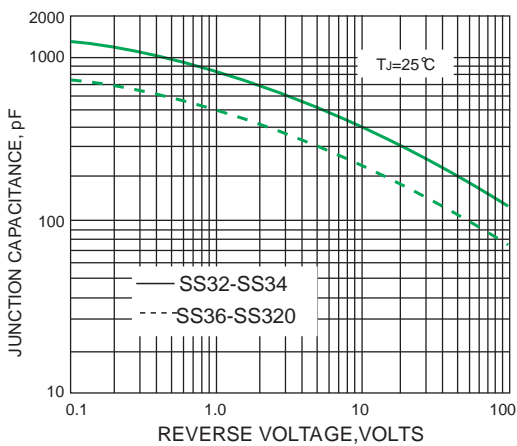
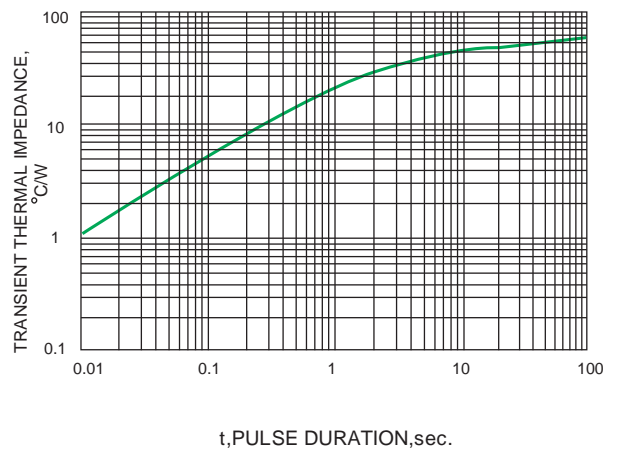
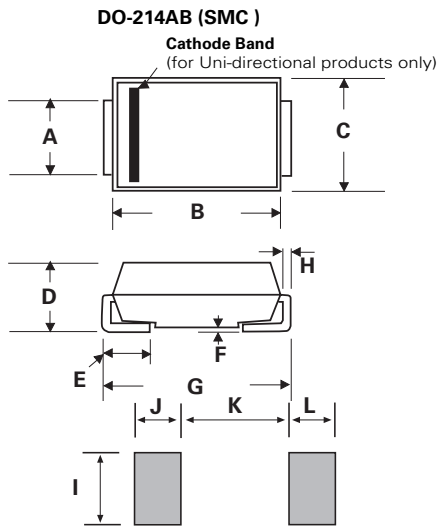


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



Dimensions

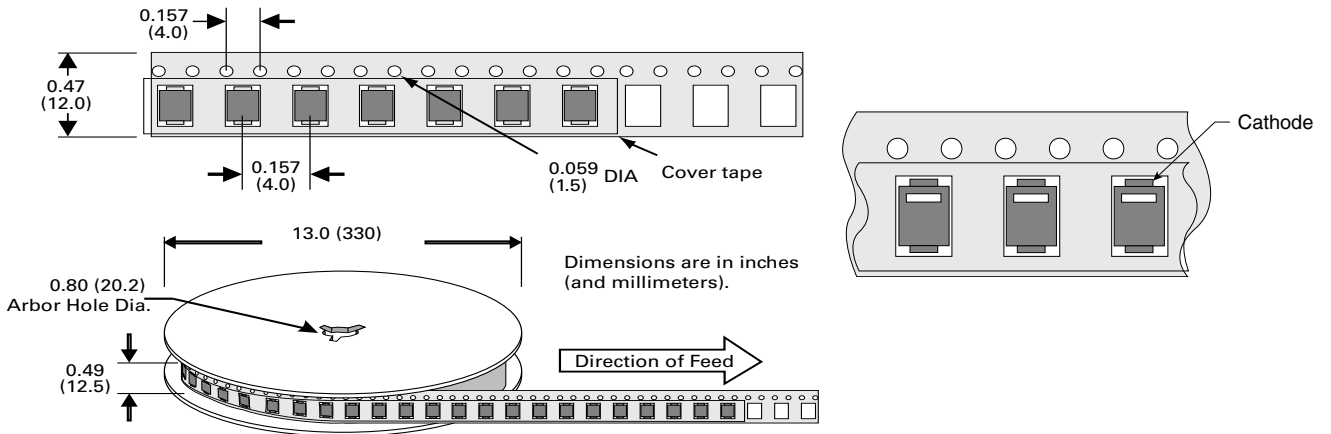


Dimensions	Inches		Millimeters	
	Min	Max	Min	Max
A	0.108	0.128	2.750	3.250
B	0.260	0.291	6.600	7.400
C	0.220	0.246	5.590	6.250
D	0.078	0.108	1.980	2.750
E	0.030	0.060	0.760	1.520
F	0.002	0.008	0.051	0.203
G	0.303	0.323	7.700	8.200
H	0.006	0.012	0.152	0.305
I	0.129	-	3.300	-
J	0.094	-	2.400	-
K	-	0.165	-	4.200
L	0.094	-	2.400	-

Packaging Options

Part number	Component Package	Quantity	Packaging Option	Packaging Specification
SS3XX	DO-214AB	3000	Tape & Reel - 16mm tape/13" reel	EIA STD RS-481

Tape and Reel Specication



Note: Devices are packde in accordance with EIA standard RS-481-Aand specification given above.