

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage -20 to 200 Volts Forward Current -10.0 Amperes

### FEATURES

The plastic package carries Underwriters Laboratory  
 Flammability Classification 94V-0  
 For surface mounted applications  
 Metal silicon junction, majority carrier conduction  
 Low power loss, high efficiency  
 Built-in strain relief, ideal for automated placement  
 High forward surge current capability  
 High temperature soldering guaranteed:  
 250°C/10 seconds at terminals  
 AEC-Q101 qualified (Automotive grade with suffix "Q".)  
 Exsemi technology



### MECHANICAL DATA

**Case:** JEDEC DO-214AB molded plastic body  
**Terminals:** leads solderable per MIL-STD-750, Method 2026  
**Polarity:** Color band denotes cathode end  
**Mounting Position:** Any

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.  
 Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Number	SYMBOLS	SS 1020	SS 1030	SS 1040	SS 1050	SS 1060	SS 1080	SS 10100	SS 10150	SS 10200	UNITS	
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	30	40	50	60	80	100	150	200	VOLTS	
Maximum RMS voltage	$V_{RMS}$	14	21	28	35	42	56	70	105	140	VOLTS	
Maximum DC blocking voltage	$V_{DC}$	20	30	40	50	60	80	100	150	200	VOLTS	
Maximum average forward rectified current at $T_L$ (see fig.1)	$I_{(AV)}$	10.0									Amp	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	120.0									Amps	
Maximum instantaneous forward voltage at 10.0A	$V_F$	0.60			0.75		0.85		0.95		Volts	
Maximum DC reverse current at rated DC blocking voltage	$I_R$	0.5					0.1					mA
$T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$		50					10					
Typical thermal resistance (NOTE 1)	$R_{\theta JA}$	65.0									$^\circ\text{C/W}$	
Operating junction temperature range	$T_J$	-55 to +125				-55 to +150						$^\circ\text{C}$
Storage temperature range	$T_{STG}$	-55 to +150									$^\circ\text{C}$	

**Note:** 1. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

RATINGS AND CHARACTERISTIC CURVES

FIG.1: I<sub>o</sub>-TL Curve

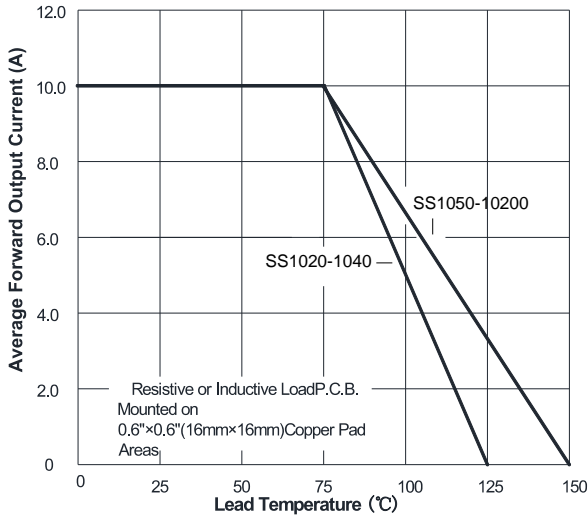


FIG.2: Forward Surge Current Capability

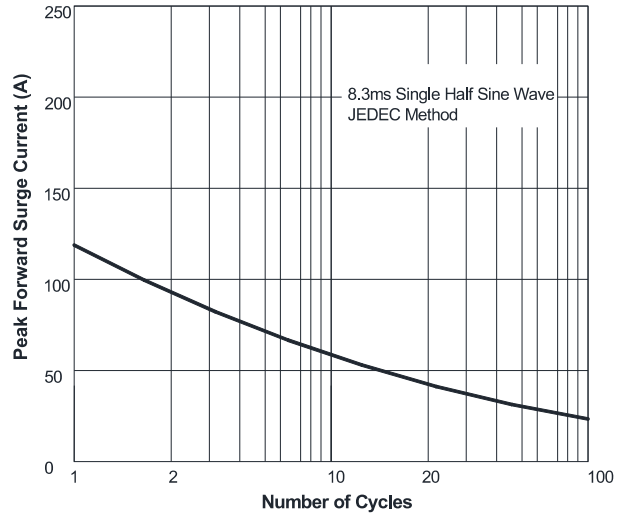


FIG.3: Forward Voltage

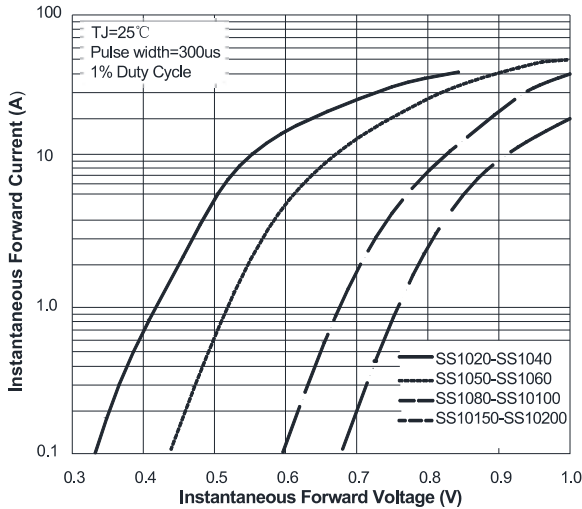
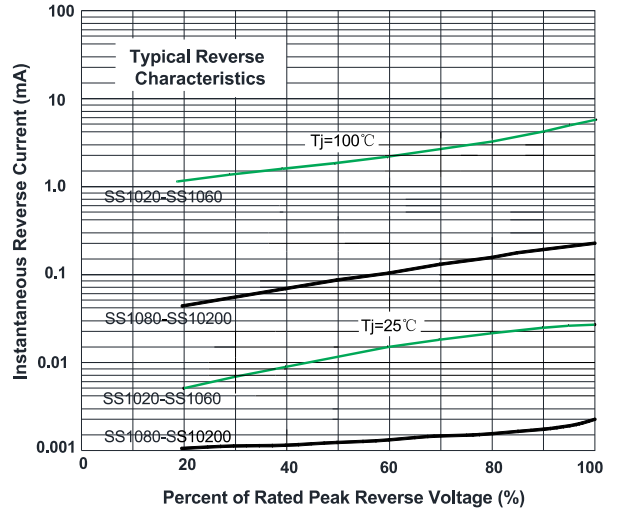
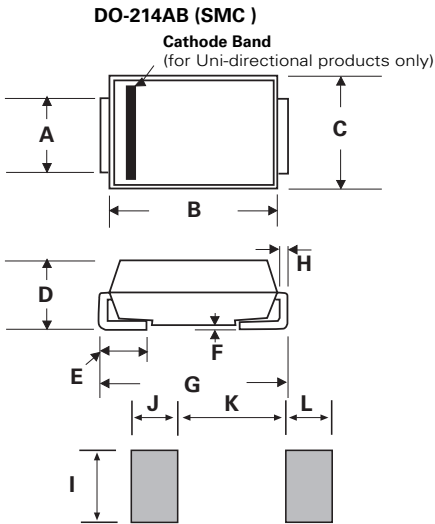


FIG.4: Typical Reverse Characteristics



Dimensions

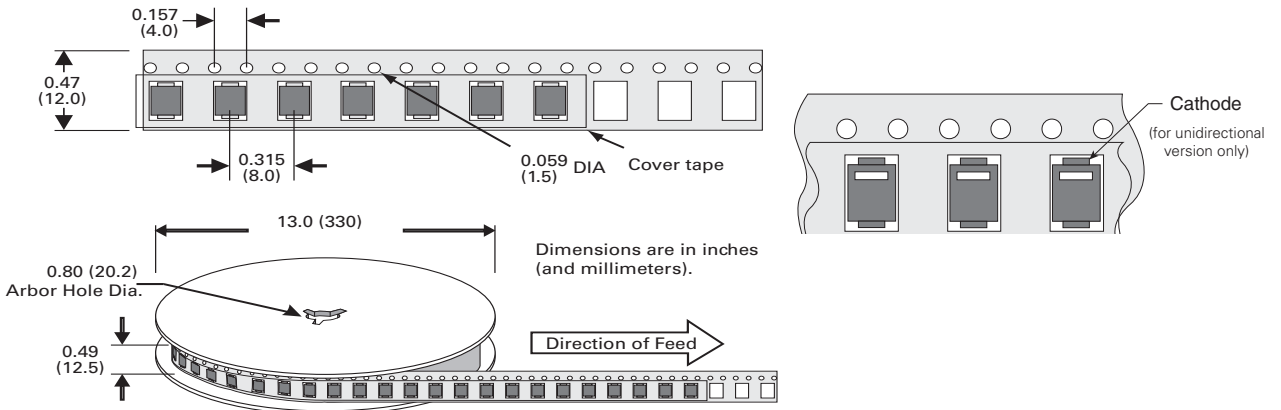


Dimensions	Inches		Millimeters	
	Min	Max	Min	Max
A	0.108	0.128	2.750	3.250
B	0.260	0.291	6.600	7.400
C	0.220	0.246	5.590	6.250
D	0.078	0.108	1.980	2.750
E	0.030	0.060	0.760	1.520
F	0.002	0.008	0.051	0.203
G	0.303	0.323	7.700	8.200
H	0.006	0.012	0.152	0.305
I	0.129	-	3.300	-
J	0.094	-	2.400	-
K	-	0.165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

Ordering Information

Part number	Component Package	Quantity	Packaging Option	Packaging Specification
SS10XX	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.