

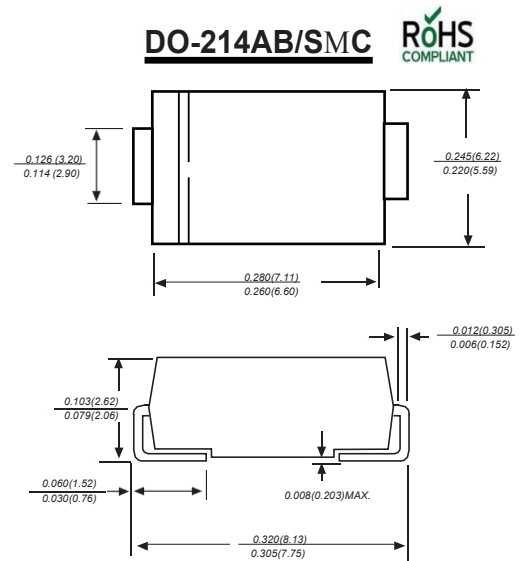
## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

### 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

### Mechanical Data

Case : JEDEC DO-214AB/SMC molded plastic body  
 Terminals : Solderable per MIL-STD-750, Method 2026  
 Polarity : Color band denotes cathode end Mounting  
 Position : Any  
 Weight : 0.0077 ounce, 0.22 grams



Dimensions in inches and (millimeters)

### Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

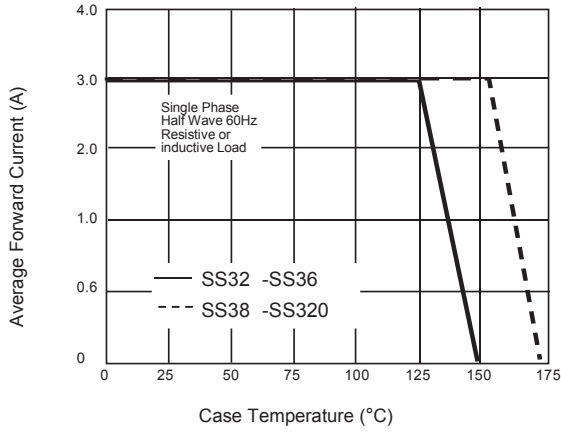
Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	SYMBOLS	320T3G	330T3G	340T3G	350T3G	360T3G	380T3G	3100T3G	3150T3G	3200T3G	UNITS	
Marking Code		SS32	SS33	SS34	SS35	SS36	SS38	SS310	SS315	SS320		
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	20	30	40	50	60	80	100	150	200	V	
Maximum RMS voltage	V <sub>RMS</sub>	14	21	28	35	42	56	70	105	140	V	
Maximum DC blocking voltage	V <sub>DC</sub>	20	30	40	50	60	80	100	150	200	V	
Maximum average forward rectified current at TL (see fig. 1)	I <sub>(AV)</sub>	3.0									A	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	50									A	
Maximum instantaneous forward voltage at 3.0A	V <sub>F</sub>	0.55			0.70			0.82		0.90	V	
Maximum DC reverse current at rated DC blocking voltage T <sub>A</sub> =25°C T <sub>A</sub> =125°C	I <sub>R</sub>	0.5						0.2		2.0		mA
Typical junction capacitance (NOTE 1)	C <sub>J</sub>	500				300						pF
Typical thermal resistance (NOTE 2)	R <sub>θJA</sub>	55.0									°C/W	
Operating junction temperature range	T <sub>J</sub>	-55 to +150						-55 to +175				°C
Storage temperature range	T <sub>STG</sub>	-55 to +175									°C	

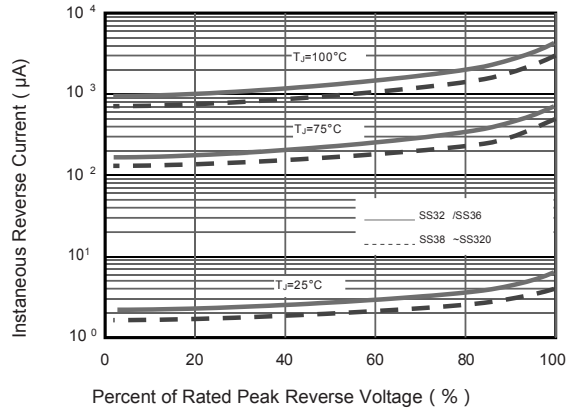
**Note:** 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.  
 2. P.C.B. mounted with 2.0"x2.0" (5.0x5.0cm) copper pad areas

# Typical Characteristics

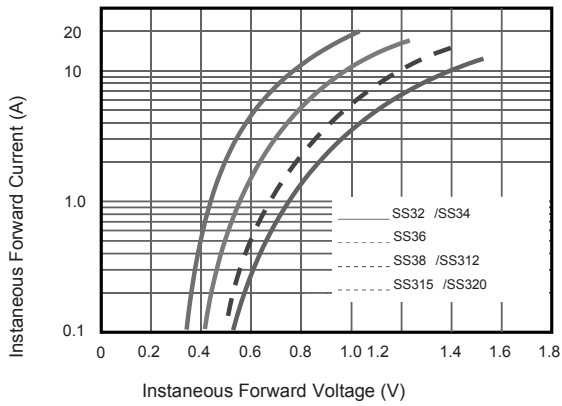
**Fig.1 Forward Current Derating Curve**



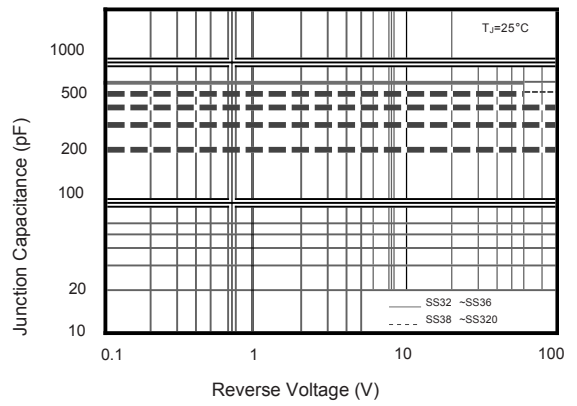
**Fig.2 Typical Reverse Characteristics**



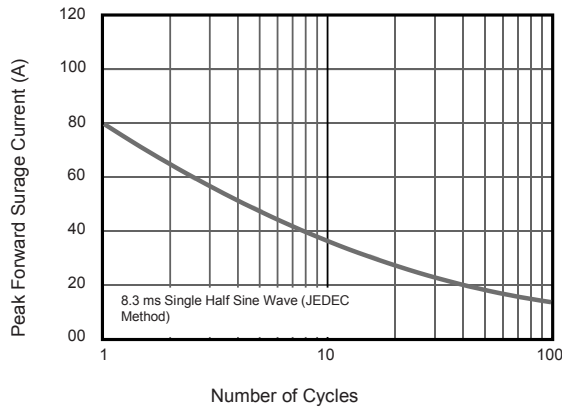
**Fig.3 Typical Forward Characteristic**



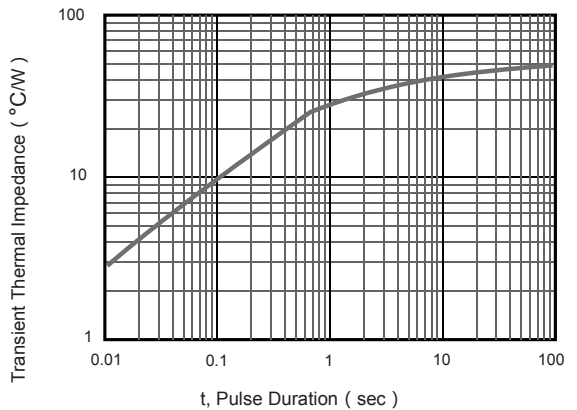
**Fig.4 Typical Junction Capacitance**



**Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**



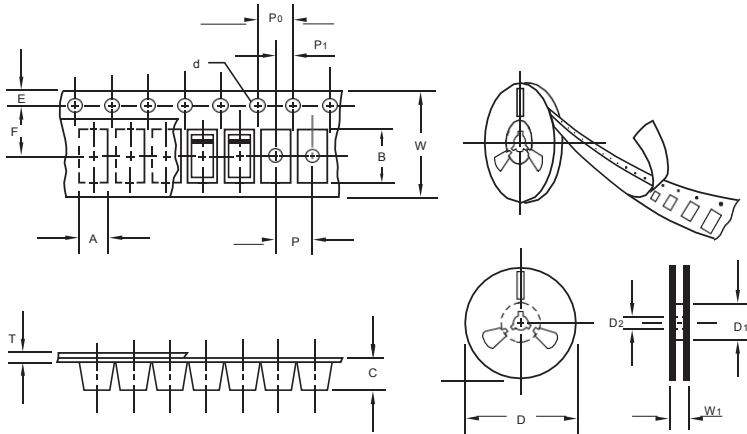
**Fig.6 Typical Transient Thermal Impedance**



The curve above is for reference only.

### Packing information

unit:mm



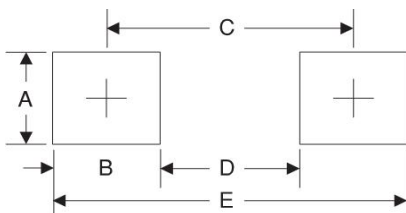
Item	Symbol	Tolerance	SMC
Carrier width	A	0.1	6.15
Carrier length	B	0.1	8.41
Carrier depth	C	0.1	2.42
Sprocket hole	d	0.05	1.50
13" Reel outside diameter	D	2.0	330.00
13" Reel inner diameter	D <sub>1</sub>	min	50.00
Feed hole diameter	D <sub>2</sub>	0.5	13.00
Sprocket hole position	E	0.1	1.75
Punch hole position	F	0.1	7.50
Punch hole pitch	P	0.1	8.00
Sprocket hole pitch	P <sub>0</sub>	0.1	4.00
Embossment center	P <sub>1</sub>	0.1	2.00
Overall tape thickness	T	0.1	0.25
Tape width	W	0.3	16.00
Reel width	W <sub>1</sub>	1.0	16.50

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

### Reel packing

PACKAGE	REEL SIZE	REEL (pcs)	COMPONENT SPACING (mm)	BOX (pcs)	INNER BOX (mm)	REEL DIA, (mm)	CARTON SIZE (mm)	CARTON (pcs)	APPROX. GROSS WEIGHT (kg)
SMC	13"	3,000	4.0	6000	190*190*41	330	365*365*340	42000	14.0

### Suggested Pad Layout



Symbol	Unit (mm)	Unit (inch)
A	4.3	0.170
B	4.1	0.160
C	7.9	0.311
D	3.8	0.150
E	12	0.472