

SS12~S100

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

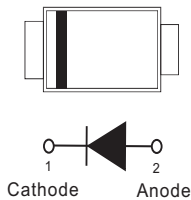
VOLTAGE 20 to 100 Volt **CURRENT** 1 Ampere

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
- High current capacity, low V_F
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

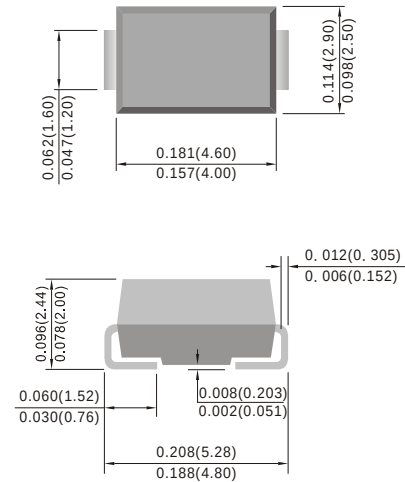
MECHANICAL DATA

- Case : JEDEC DO-214AC molded plastic
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Color band denotes cathode end
- Standard packaging : 12mm tape (EIA-481)
- Weight : 0.0023 ounces, 0.0679 grams



SMA / DO-214AC

Unit : inch(mm)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOL	SS12	SS13	SS14	SS15	SS16	SS18	S100	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	80	100	V
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	80	100	V
Maximum Average Forward Current at T _L =75°C	I _{F(AV)}	1							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	30							A
Maximum Forward Voltage at 1A (Note 1)	V _F	0.5			0.7		0.85		V
Maximum DC Reverse Current at Rated DC Blocking Voltage T _J =25°C T _J =100°C	I _R	0.2 6			0.1 5		0.5 2		mA
Typical Thermal Resistance (Note 2)	R _{θJL} R _{θJA}	28 88							°C / W
Operating Junction Temperature Range	T _J	-55 to +125							°C
Storage Temperature Range	T _{STG}	-55 to +150							°C

NOTES :

1. Pulse Test with PW = 300μsec, 1% Duty Cycle.
2. Mounted on P.C. Board with 5mm² (0.013mm thick) copper pad areas.

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RATING AND CHARACTERISTIC CURVES

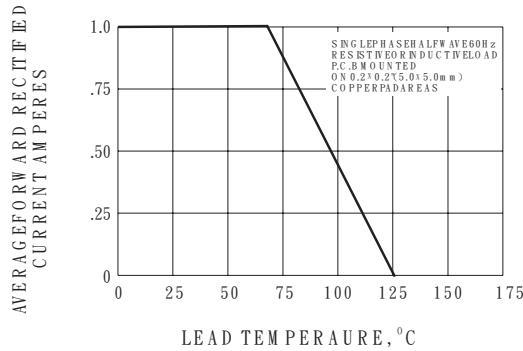


Fig. 1 FORWARD CURRENT DERATING CURVE

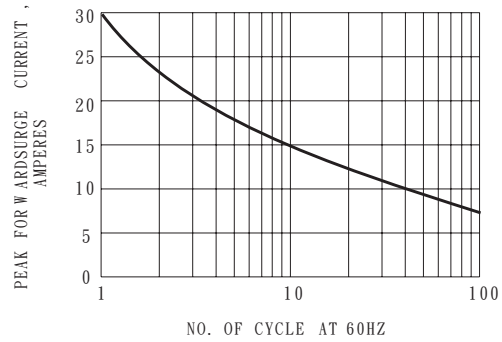


Fig. 2 MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

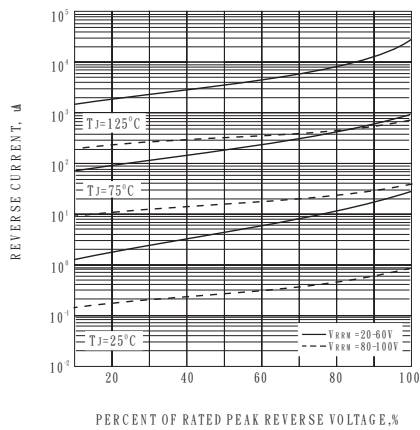


Fig. 3 TYPICAL REVERSE CHARACTERISTIC

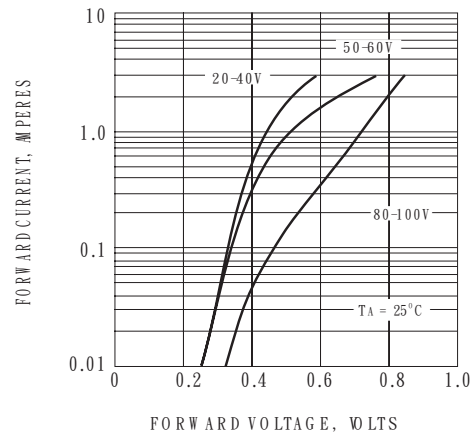


Fig. 4 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

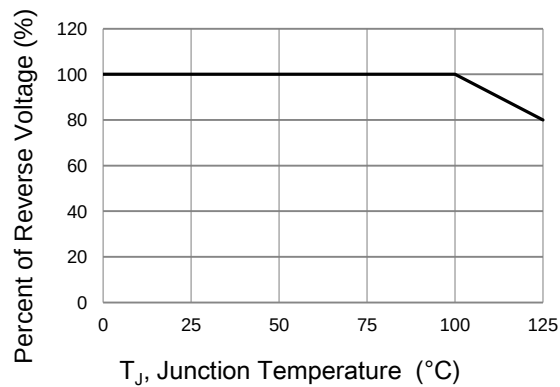
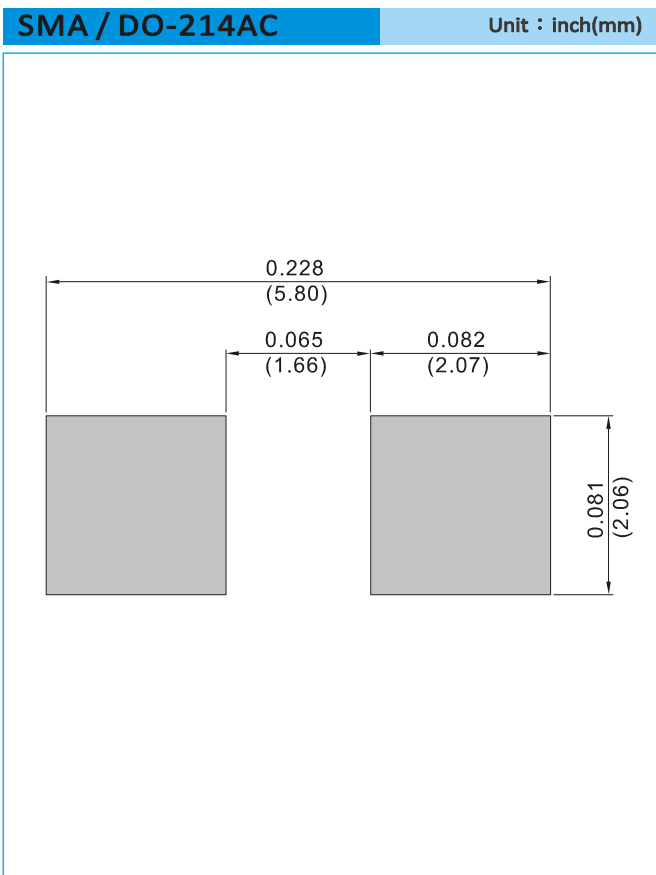


Fig. 5 Operating Temperature Derating Curve

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MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
 - T/R - 7.5K per 13" plastic Reel
 - T/R - 1.8K per 7" plastic Reel

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Part No_packing code_Version

SS12_R1_00001

SS12_R2_00001

For example :

RB500V-40_R2_00001

Part No.

Serial number

Version code means HF

Packing size code means 13"

Packing type means T/R

Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			



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