PANJIT SEMI CONDUCTOR

MS14~MS120

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

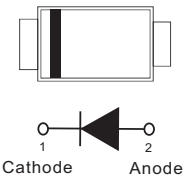
VOLTAGE 40 to 200 Volt **CURRENT** 1 Ampere

FEATURES

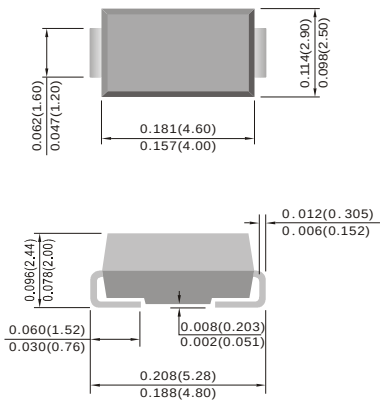
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications in order to optimize board space
- Metal to silicon rectifier. majority carrier conduction
- Low power loss,high efficiency
- High surge capacity
- High current capacity ,low V_F
- Lead 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 ounce, 0.0679 gram



SMA / DO-214AC Unit : inch(mm)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.

PARAMETER	SYMBOL	MS14	MS14A	MS15	MS16	MS18	MS19	MS110	MS115	MS120	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	40	45	50	60	80	90	100	150	200	V
Maximum RMS Voltage	V_{RMS}	28	31.5	35	42	56	63	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	40	45	50	60	80	90	100	150	200	V
Maximum Average Forward Current (See Figure 1)	$I_{F(AV)}$	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 (Notes 1)	V_F	0.7		0.74		0.8			0.9		V
Maximum DC Reverse Current at Rated DC Blocking Voltage T_J=25°C	I_R	1							0.5		μA
Typical DC Reverse Current at Rated DC Blocking Voltage T_J=125°C	I_R	0.3				0.2			0.02		mA
Typical Thermal Resistance (Notes 2)	$R_{\theta JL}$ $R_{\theta JA}$	30 95									°C / W
Operating Junction and Storage Temperature Range	T_J,T_{STG}	-55 to +150	-65 to +175								°C

NOTES :

1.Pulse Test with PW =300μsec, 1% Duty Cycle.

2.Mounted on P.C. Board with 5mm^2 (0.013mm thick) copper pad areas.

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RATING AND CHARACTERISTIC CURVES

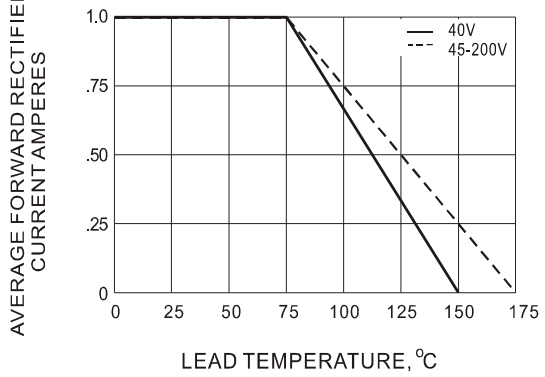

Fig.1 FORWARD CURRENT DERATING CURVE

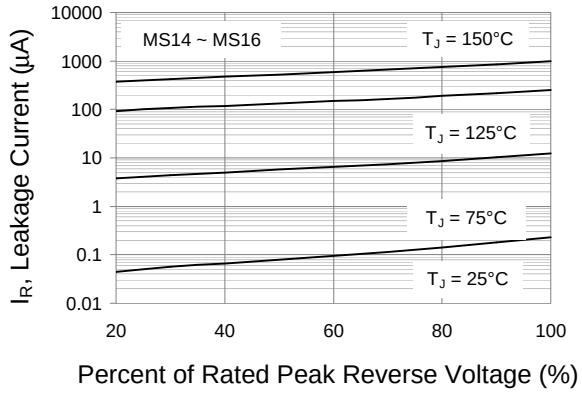

Fig.2 Typical Reverse Characteristics

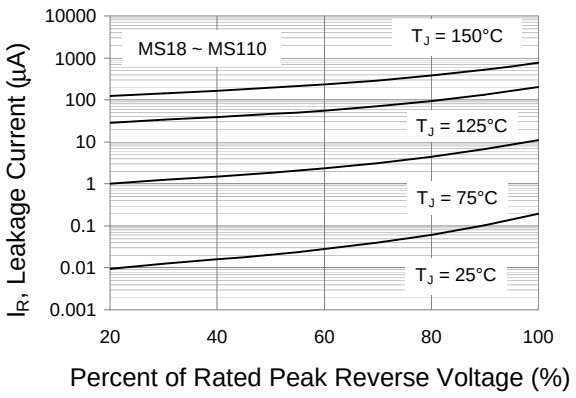

Fig.3 Typical Reverse Characteristics

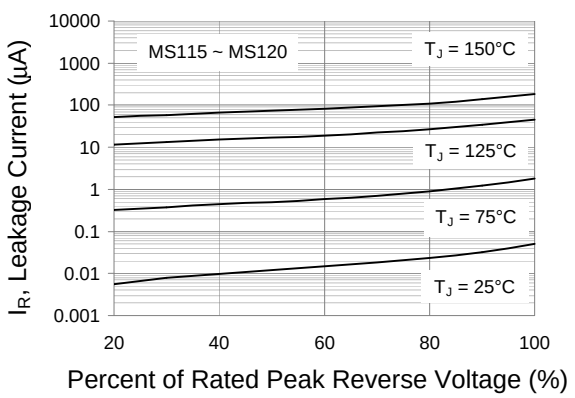

Fig.4 Typical Reverse Characteristics

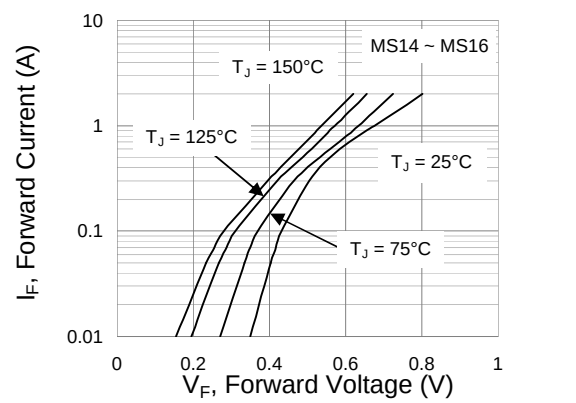

Fig.5 Typical Forward Characteristics

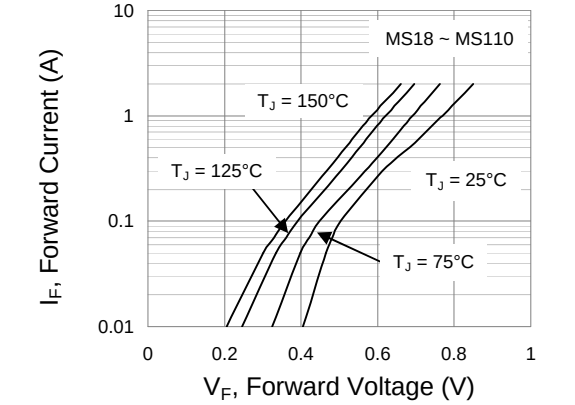

Fig.6 Typical Forward Characteristics

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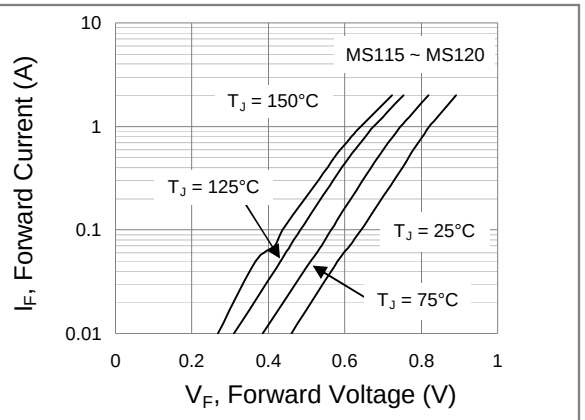

Fig.7 Typical Forward Characteristics

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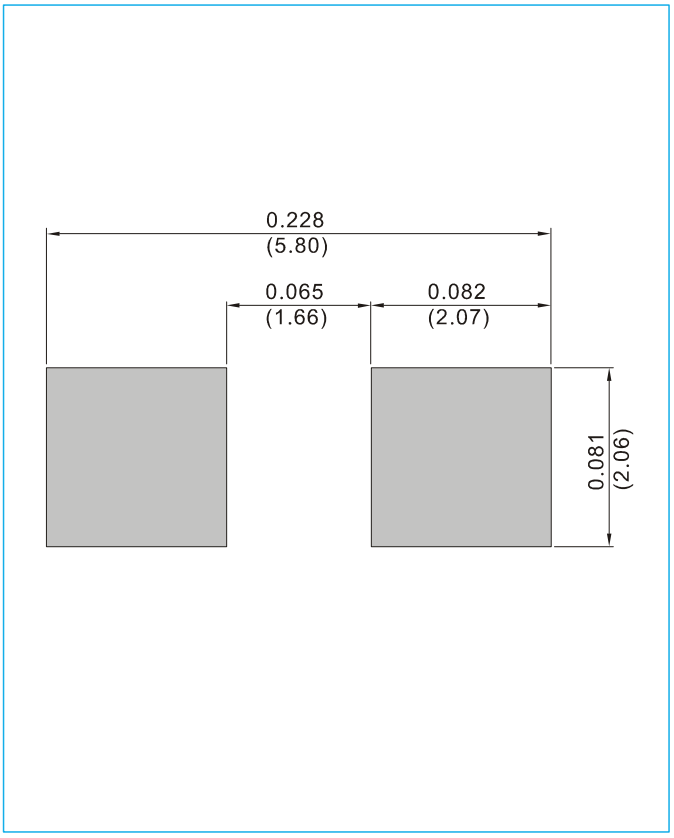
MOUNTING PAD LAYOUT

SMA / DO-214AC Unit：inch(mm)



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

MS14_R1_00001
MS14_R2_00001

For example :

RB500V-40_R2_00001

Packing Code XX				Version Code XXXXX		
Packing type	1st Code	Packing size code	2nd Code	HF or RoHS	1st Code	2nd~5th 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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