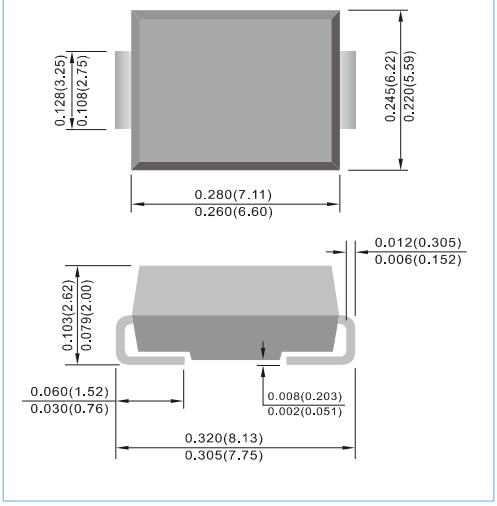
PANJIT SEMI CONDUCTOR

S5A SERIES

SURFACE MOUNT RECTIFIER

VOLTAGE 50~1000 Volt **CURRENT** 5 Ampere

SMC / DO-214AB Unit : inch(mm)

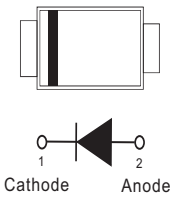


FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications in order to optimize board space
- Easy pick and place
- Glass passivated junction
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

MECHANICAL DATA

- Case: JEDEC SMC / DO-214AB molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750,Method 2026
- Polarity: Color band denotes cathode end
- Standard packaging: 16mm tape (EIA-481)
- Weight: 0.0082 ounces, 0.23 grams



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 , derate current by 20%.

PARAMETER	SYMBOL	S5A	S5B	S5D	S5G	S5J	S5K	S5M	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	5							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	275							A
Rating for Fusing (t<8.3ms)	I^2t	313							A^2sec
Maximum Forward Voltage at 5A	V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage T_J=25°C / T_J=125°C	I_R	10 250							μA
Typical Junction Capacitance (NOTES 1)	C_J	80						46	pF
Typical Junction Resistance (NOTES 2)	$R_{\theta JA}$ $R_{\theta JL}$	75 10							°C / W
Operating Junction and Storage Temperature Range	T_J,T_{STG}	-55 to +150							°C

NOTES :
1.Measured at 1 MHZ and applied Vr=4 volts.
2.8mm^2 (0.013mm thick)land areas.

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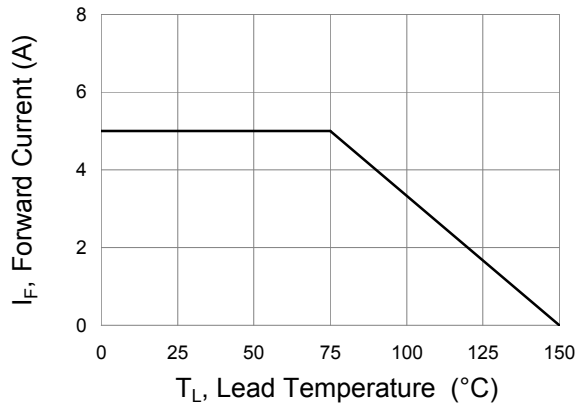


Fig.1 Forward Current Derating Curve

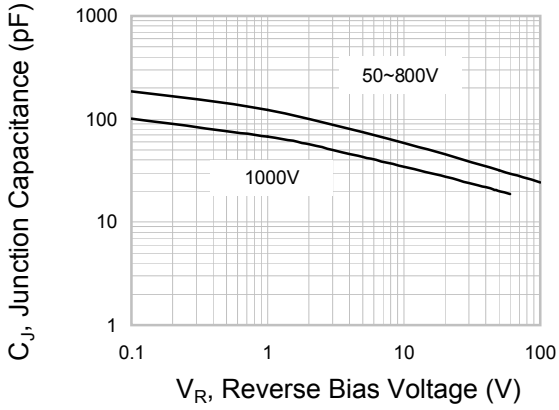


Fig.2 Typical Junction Capacitance

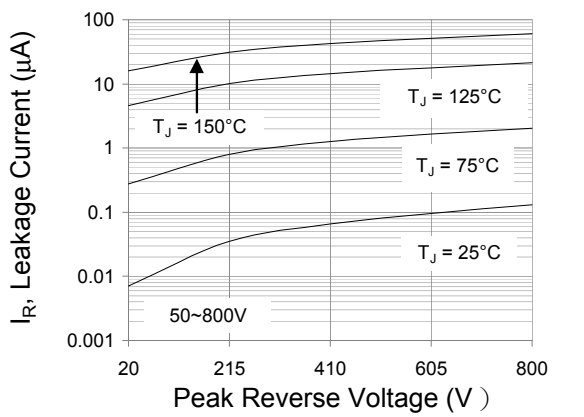


Fig.3 Typical Reverse Characteristics

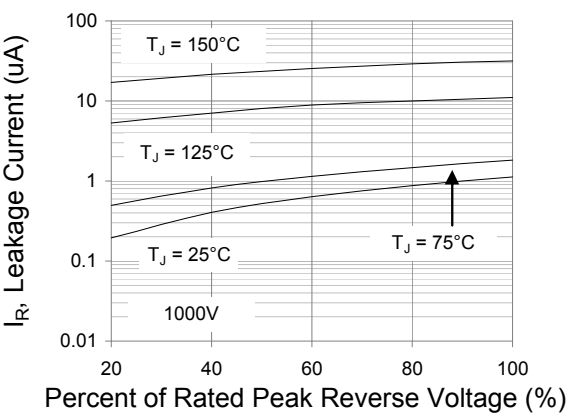


Fig.4 Typical Reverse Characteristics

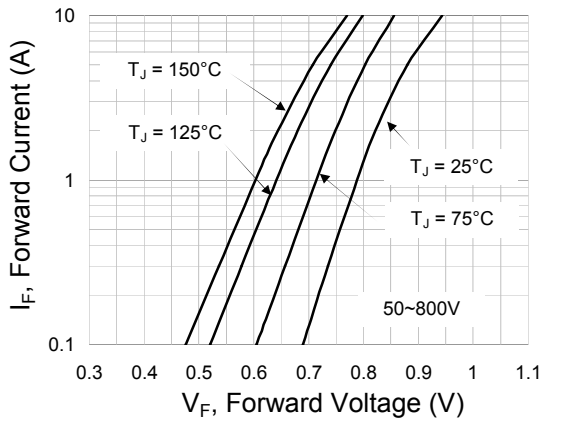


Fig.5 Typical Forward Characteristics

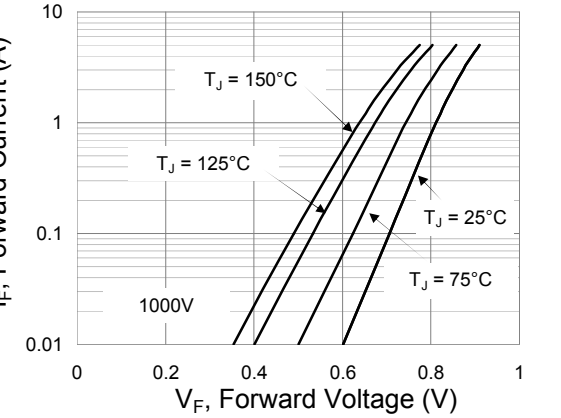
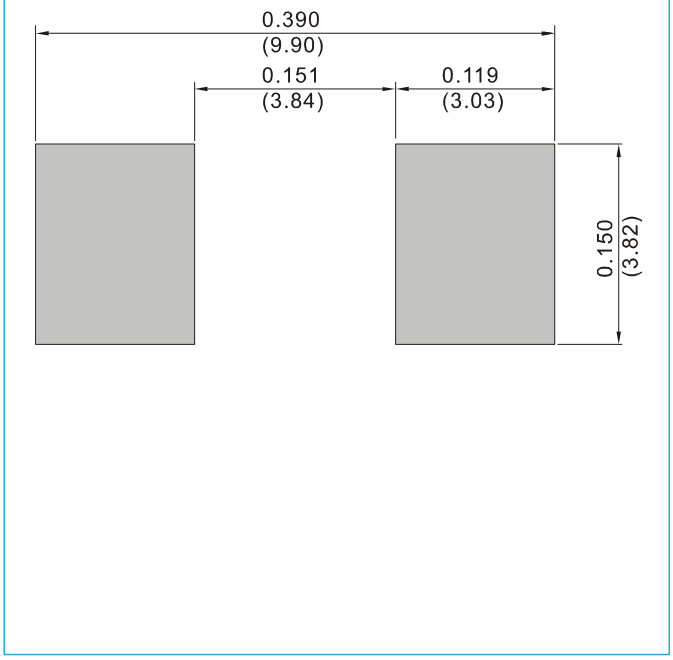


Fig.6 Typical Forward Characteristics

S5A SERIES

MOUNTING PAD LAYOUT

SMC / DO-214AB Unit : inch(mm)



ORDER INFORMATION

- Packing information

  T/R - 3K per 13" plastic Reel

  T/R - 0.8K per 7" plastic Reel

S5A SERIES

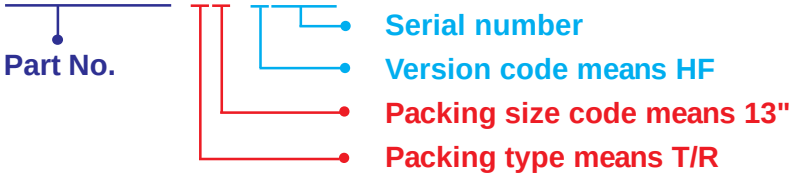
Part No_packing code_Version

S5A_R1_00001

S5A_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			

S5A SERIES

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