



S5A SERIES

SURFACE MOUNT RECTIFIER

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

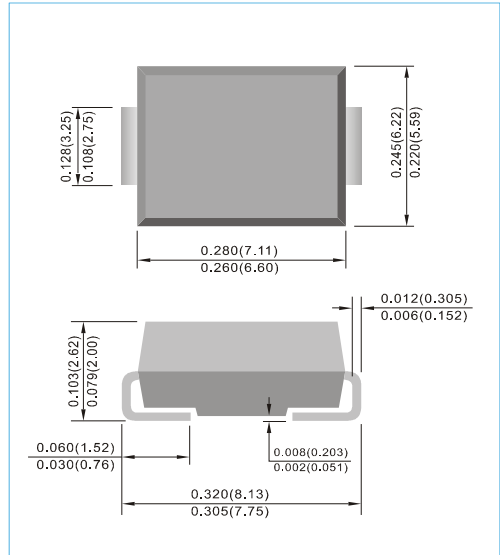
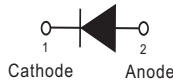
SMC / DO-214AB Unit : inch(mm)

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- 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 ² sec	
Maximum Forward Voltage at 5A	V_F	1.1							V	
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J=25^{\circ}C$ $T_J=125^{\circ}C$	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							$^{\circ}C / W$	
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150							$^{\circ}C$	

NOTES :

1. Measured at 1 MHz and applied $V_r=4$ volts.
2. $8mm^2$ (0.013mm thick) land areas.



S5A SERIES

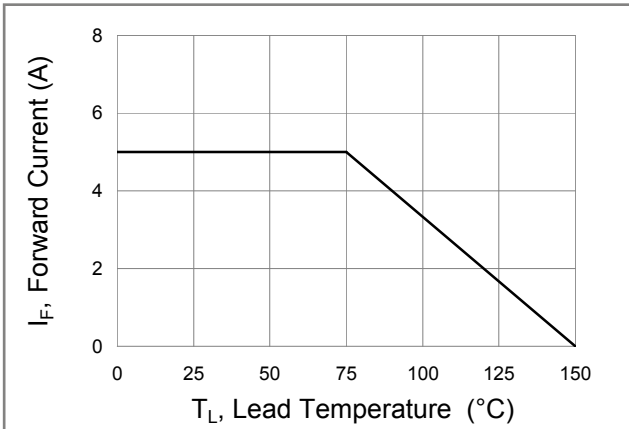


Fig.1 Forward Current Derating Curve

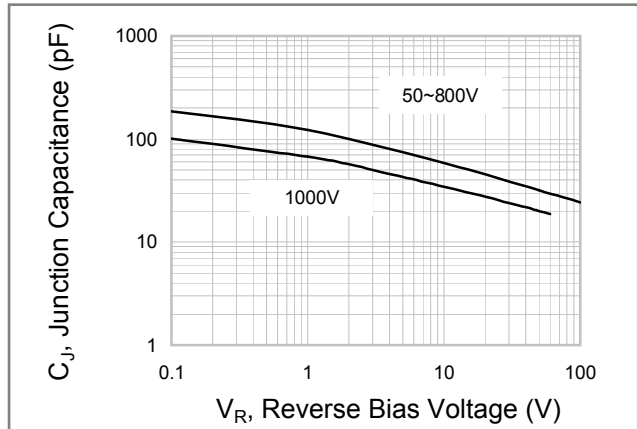


Fig.2 Typical Junction Capacitance

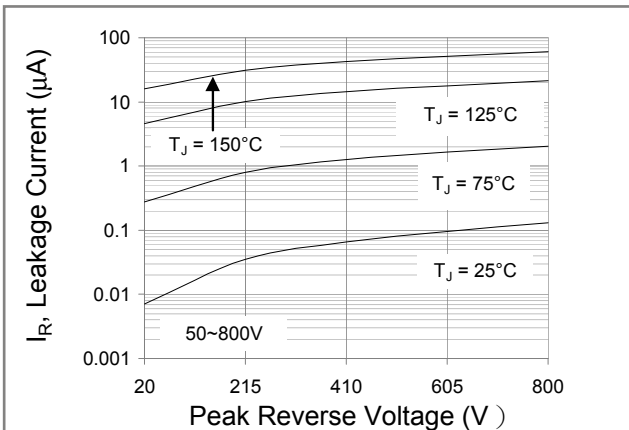


Fig.3 Typical Reverse Characteristics

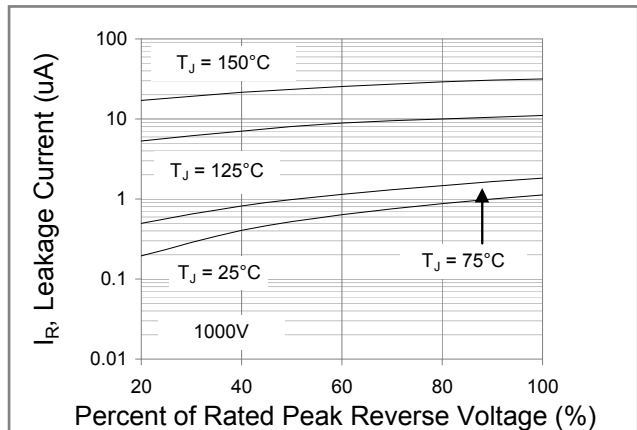


Fig.4 Typical Reverse Characteristics

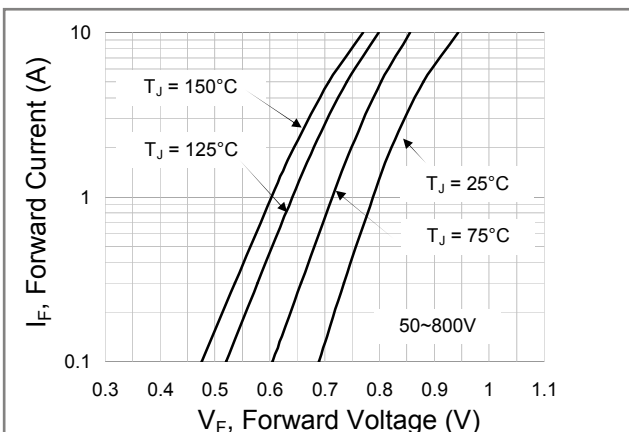


Fig.5 Typical Forward Characteristics

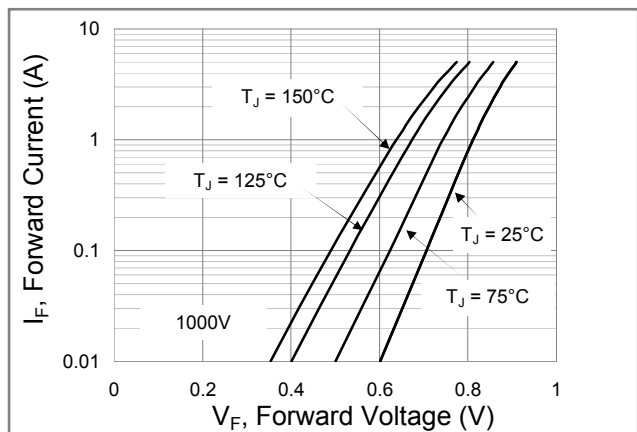


Fig.6 Typical Forward Characteristics

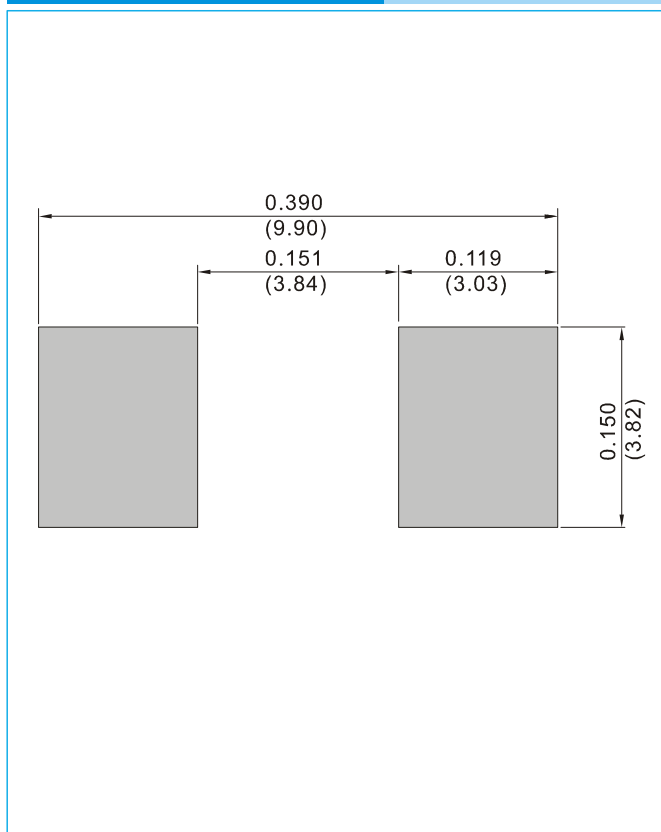


S5A SERIES

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	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			