



S5A THRU S5M

SURFACE MOUNT GENERAL RECTIFIER

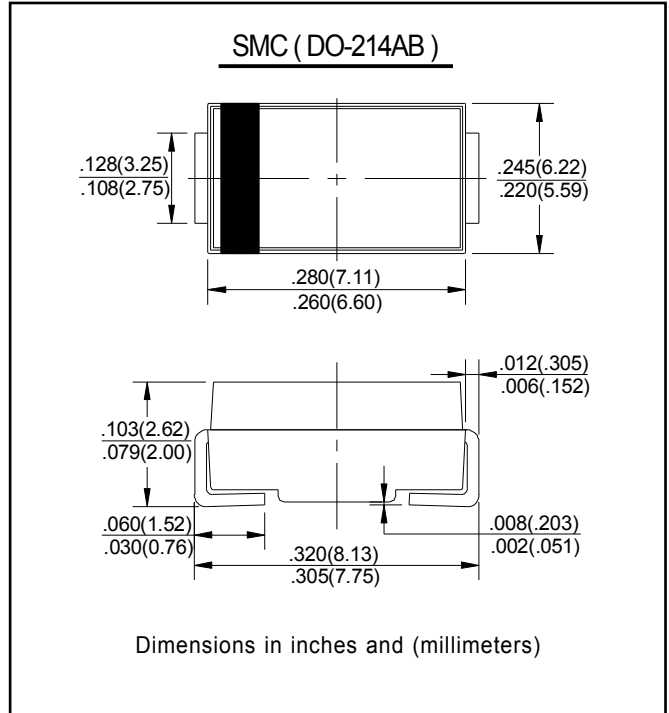
Reverse Voltage - 50 to 1000 Volts Forward Current - 5.0 Ampere

FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Low reverse leakage
- 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 SMC/DO-214AB molded plastic body
Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 0.007 ounce, 0.24grams



Maximum Ratings and Electrical Characteristics @_{T_A}=25°C unless otherwise specified

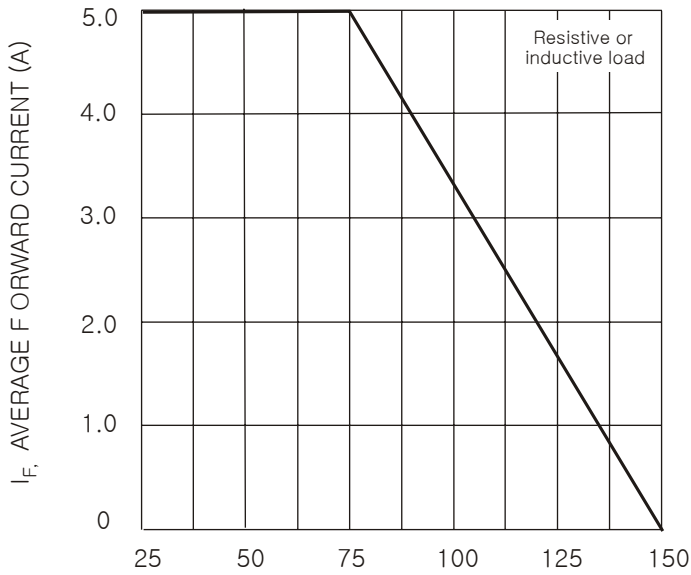
Characteristic	Symbol	S5A	S5B	S5D	S5G	S5J	S5K	S5M	Unit	
Peak Repetitive Reverse Voltage	V _{RRM}									
Working Peak Reverse Voltage	V _{RWM}	50	100	200	400	600	800	1000	V	
DC Blocking Voltage	V _R									
RMS Reverse Voltage	V _{R(RMS)}	35	70	140	280	420	560	700	V	
Average Rectified Output Current @ _{T_L} = 75°C	I _O	5.0								A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	100								A
Forward Voltage @ _{I_F} = 5.0A	V _{FM}	1.10								V
Peak Reverse Current @ _{T_A} = 25°C At Rated DC Blocking Voltage @ _{T_A} = 125°C	I _{RM}	10.0 250								μA
Typical Junction Capacitance (Note 2)	C _j	40								pF
Typical Thermal Resistance (Note 3)	R _{θJL}	10								°C/W
Operating and Storage Temperature Range	T _j , T _{STG}	-55 to +150°C								°C

Note: 1. Measured with I_F = 0.5A, I_R = 1.0A, I_{rr} = 0.25A,
2. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.
3. Mounted on P.C. Board with 8.0mm² land area.

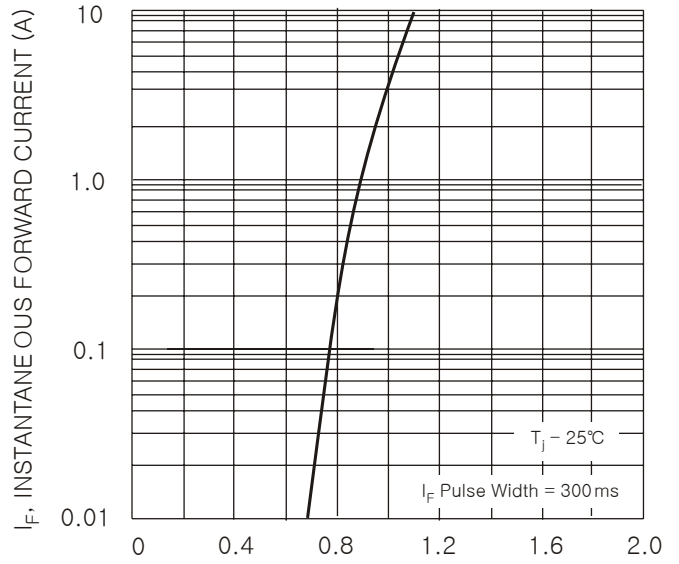


S5A THRU S5M

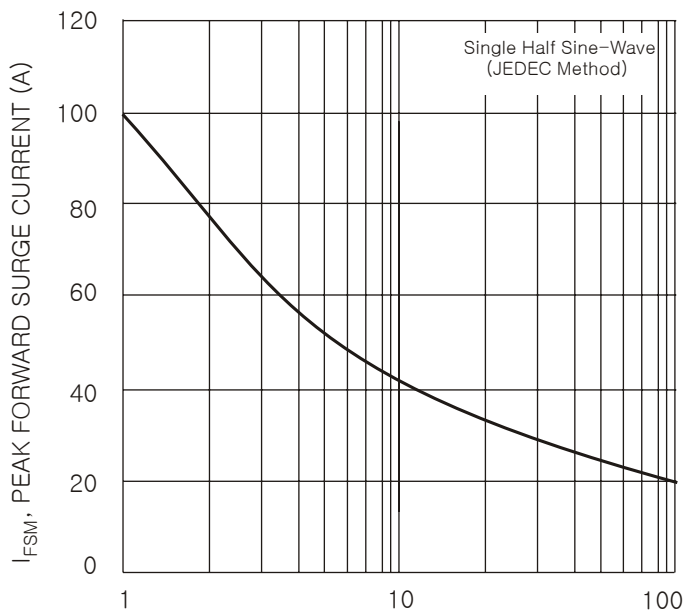
RATINGS AND CHARACTERISTIC CURVES



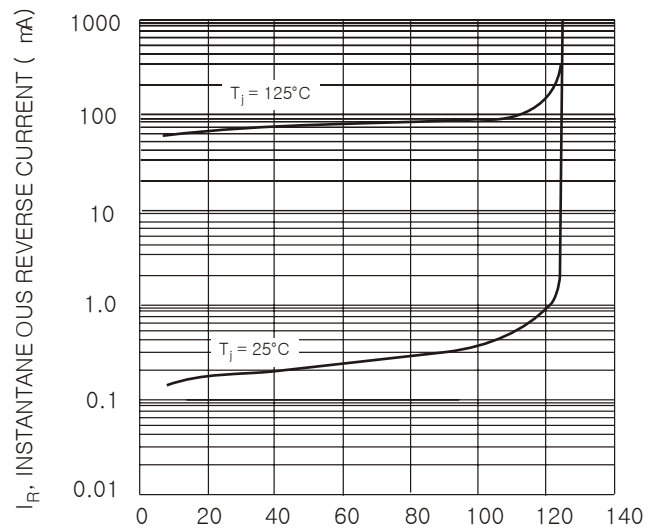
T_T , TERMINAL TEMPERATURE ($^{\circ}$ C)
Fig. 1 Forward Current Derating Curve



V_F , INSTANTANEOUS FORWARD VOLTAGE (V)
Fig. 2 Typical Forward Characteristics



NUMBER OF CYCLES AT 60 Hz
Fig. 3 Forward Surge Current Derating Curve



PERCENT OF RATED PEAK REVERSE VOLTAGE (%)
Fig. 4 Typical Reverse Characteristics