

S5A - S5M SURFACE MOUNT RECTIFIER DIODES

VOLTAGE RANGE: 50 - 1000V CURRENT: 5.0 A

Features

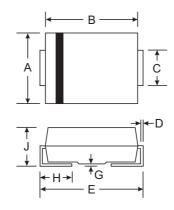
- Glass Passivated Die Construction
- Ideally Suited for Automatic Assembly
- Low Forward Voltage Drop
- Low Power Loss
- Built-in Strain Relief
- Plastic Case Material has UL Flammability Classification Rating 94V-O



- Case: SMC/DO-214AB, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.21 grams (approx.)







SMC/DO-214AB							
Dim	Min	Max					
Α	5.59	6.22					
В	6.60	7.11					
С	2.75	3.18					
D	0.15	0.31					
E	7.75	8.13					
G	0.10	0.20					
Н	0.76	1.52					
J	2.00	2.62					
All Dimensions in mm							

Maximum Ratings and Electrical Characteristics TA = 25°C unless otherwise specified

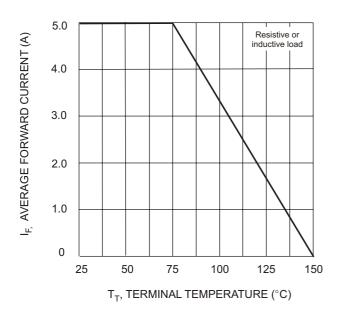
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	S5A	S5B	S5D	S5G	S5J	S5K	S5M	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	VRRM VRWM VR	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	VR(RMS)	35	70	140	280	420	560	700	٧
Average Rectified Output Current @T _L = 75°C	lo	5.0							Α
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	100					А		
Forward Voltage @I _F = 5.0A	VFM	1.15						V	
	IDM	10 250							μΑ
Typical Junction Capacitance (Note 1)	Cj				40				pF
Typical Thermal Resistance (Note 2)	R_{θ} JL				10				°C/W
Operating and Storage Temperature Range	Tj, TSTG	-65 to +150						°C	

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.

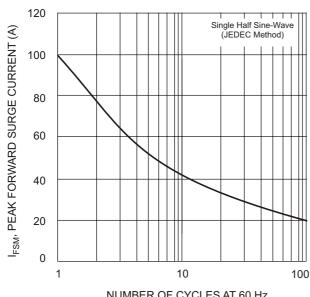
2. Mounted on P.C. Board with 8.0mm² land area.





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

Fig. 1 Forward Current Derating Curve



I_R, INSTANTANEOUS REVERSE CURRENT (mA) 1000 T_i = 125°C 100 10 1.0 T_i = 25°C 0.1 0.01 20 80 100 40 60 120 140

PERCENT OF RATED PEAK REVERSE VOLTAGE (%)
R OF CYCLES AT 60 Hz

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

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