

S5AC - S5MC SURFACE MOUNT RECTIFIER DIODES

VOLTAGE RANGE: 50 - 1000V CURRENT: 5.0 A

Features

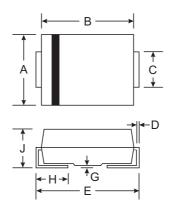
- Glass Passivated Die Construction
- Ideally Suited for Automatic Assembly
- Low Forward Voltage Drop
- Low Power Loss
- Built-in Strain Relief
- Plastic Case Material has UL Flammability Classification Rating 94V-O

Mechanical Data

- 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 T_A = 25°C unless otherwise specified

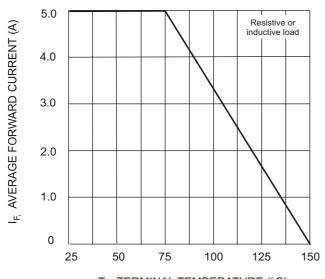
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	S5AC	S5BC	S5DC	S5GC	S5JC	S5KC	S5MC	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	V
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
	IRM	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.





T_T, TERMINAL TEMPERATURE (°C) Fig. 1 Forward Current Derating Curve

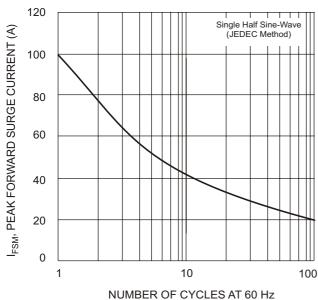
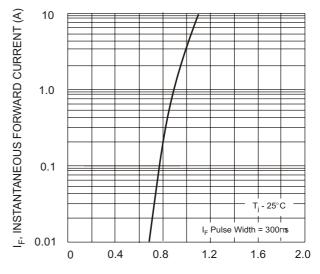
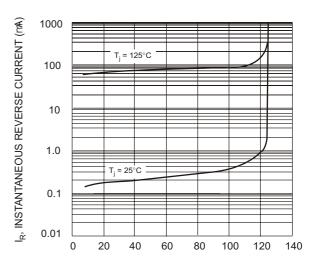


Fig. 3 Forward Surge Current Derating Curve



 $V_{\rm F}$, INSTANTANEOUS FORWARD VOLTAGE (V) Fig. 2 Typical Forward Characteristics



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