

S5AC THRU S5MC **SURFACE MOUNT GLASS PASSIVATED RECTIFIER**


SMC

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-0
- This is a Pb - Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Circuit Diagram



Mechanical Data

- Case: SMC molded plastic
- Lead: Solder Plated , Solderable Per MIL-STD 750 , Method 2026
- Polarity: Color band denotes cathode end
- Weight: 0.21 grams

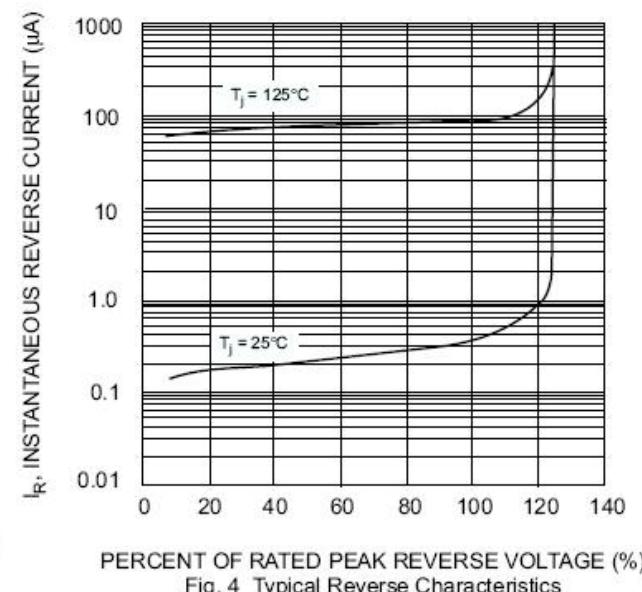
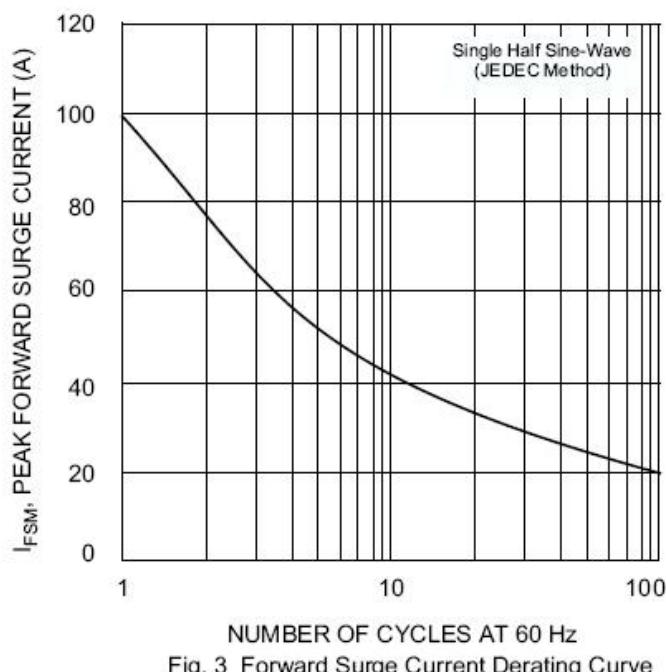
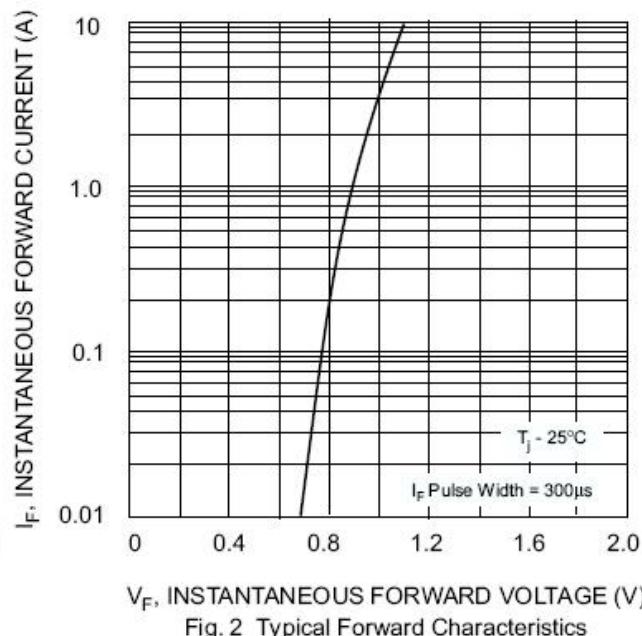
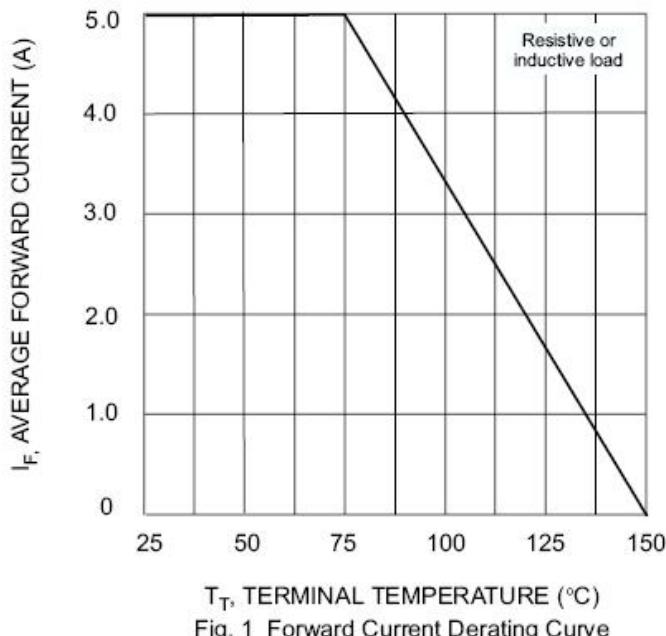
Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

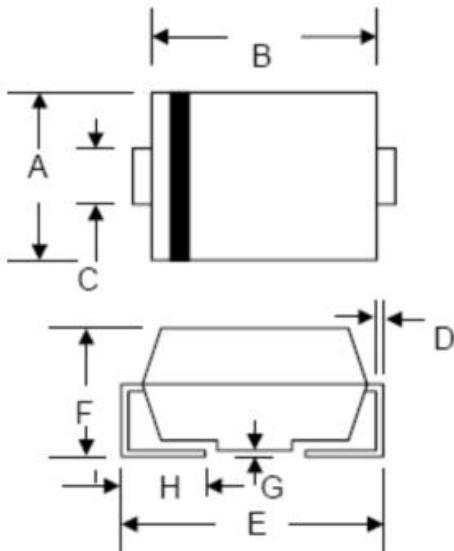
Characteristics	Symbol	S5AC	S5BC	S5DC	S5GC	S5JC	S5KC	S5MC	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Average Rectified Output Current @ $T_L= 75^\circ\text{C}$	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 @ $I_F = 5.0$ A	V_F				1.15				V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 125^\circ\text{C}$	I_{RM}				10				μA
Typical Junction Capacitance(Note2)	C_J				40				pF
Typical Thermal Resistance Junction to Lead (Note 3)	$R_{\theta JL}$				10				$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	T_J, T_{STG}				-65 to +150				$^\circ\text{C}$

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Mounted on P.C.B. with 8.0mm² land areas.

Ratings and Characteristics Curves



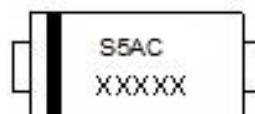
Mechanical Dimensions SMC


SYMBOL	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	5.59	6.22	0.220	0.245
B	6.60	7.11	0.260	0.280
C	2.90	3.20	0.114	0.126
D	0.152	0.305	0.006	0.012
E	7.75	8.13	0.305	0.320
F	2.00	2.62	0.079	0.103
G	-	0.203	-	0.008
H	0.76	1.52	0.030	0.060

Ordering Information

Device	Package	Shipping
S5AC-S5MC	SMC (Pb-Free)	3000pcs / reel

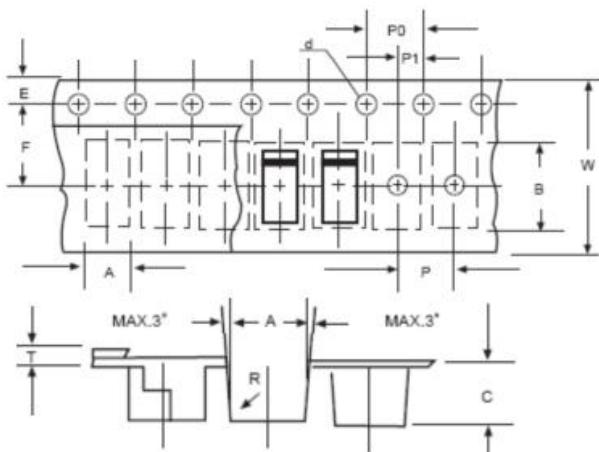
For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

Marking Diagram


Where XXXXX is YYWWL

S5AC = Part Name
 YY = Year
 WW = Week
 L = Lot Number

Cautions: Molding resin
 Epoxy resin UL:94V-0

Carrier Tape Specification SMC


SYMBOL	Millimeters	
	Min.	Max.
A	5.90	6.10
B	8.20	8.40
C	2.40	2.60
d	1.40	1.60
E	1.40	1.60
F	7.60	7.70
P	7.90	8.10
P0	3.90	4.10
P1	3.90	4.10
T	-	0.600
W	15.80	16.20

Technical Data
Data Sheet N0565, Rev.A



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