S5AC THRU S5MC SMC

Surface Mount General Purpose Silicon Rectifiers

Reverse Voltage - 50 to 1000 V

Forward Current - 5 A

FEATURES

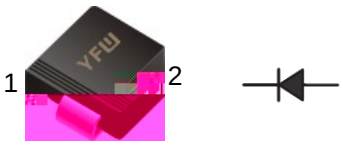
For surface mounted applications
Low profile package
Glass Passivated Chip Junction
Easy to pick and place
Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

Case: DO-214AB/SMC
Terminals: Solderable per MIL-STD-750, Method 2026
Approx. Weight: 0.22g /0.0077oz

Pinning

1.Cathode	2.Anode



DO-214AB/SMC

Marking Code	
S5AC	YFW S5A
S5BC	YFW S5B
S5DC	YFW S5D
S5GC	YFW S5G
S5JC	YFW S5J
S5KC	YFW S5K
S5MC	YFW S5M

Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	S5AC	S5BC	S5DC	S5GC	S5JC	S5KC	S5MC	Units
Maximum Repetitive 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 at T_c = 115 °C	$I_{F(AV)}$	5							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	120							A
Maximum Instantaneous Forward Voltage at 5 A	V_F	1.0							V
Maximum DC Reverse Current T_a = 25 °C at Rated DC Blocking Voltage T_a=125 °C	I_R	5 100							μA
Typical Junction Capacitance (1)	C_j	50							pF
Typical Thermal Resistance (2)	$R_{\theta JA}$/ $R_{\theta JC}$	35/13							°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150							°C

(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

(2) P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

Fig.1 Forward Current Derating Curve

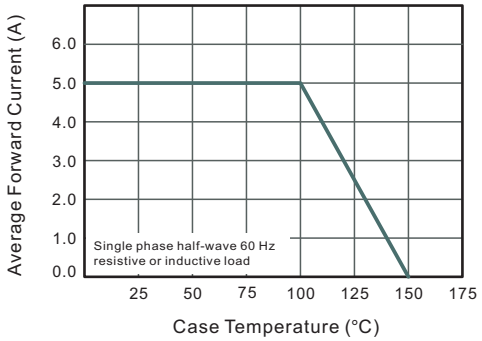


Fig.2 Typical Reverse Characteristics

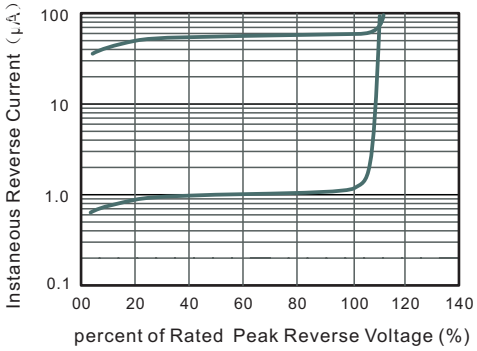


Fig.3 Typical Forward Characteristic

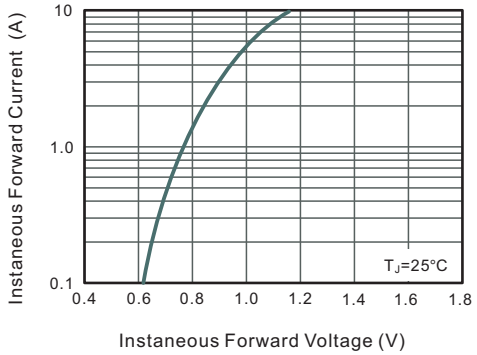


Fig.4 Typical Junction Capacitance

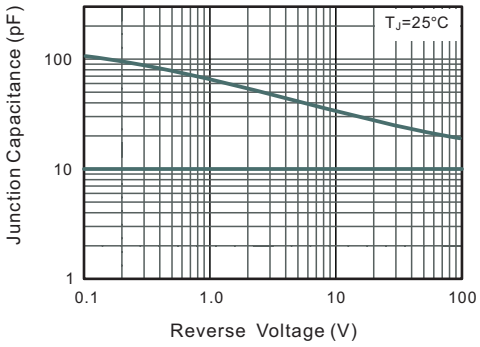
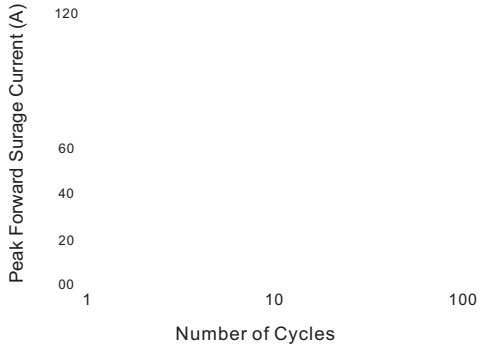


Fig.6 Maximum Non-Repetitive Peak Forward Surage Current



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