S3AC THRU S3MC SMC

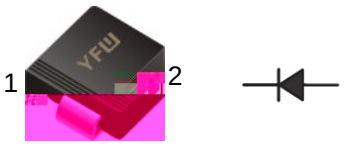
Surface Mount General Purpose Silicon Rectifiers

Reverse Voltage - 50 to 1000 V

Forward Current - 3 A

Pinning

1.Cathode	2.Anode



DO-214AB/SMC

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

Marking Code

S3AC	YFW S3A
S3BC	YFW S3B
S3DC	YFW S3D
S3GC	YFW S3G
S3JC	YFW S3J
S3KC	YFW S3K
S3MC	YFW S3M

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	S3AC	S3BC	S3DC	S3GC	S3JC	S3KC	S3MC	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	$I_{F(AV)}$	3							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	90							A
Maximum Instantaneous Forward Voltage at 10 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	40							pF
Typical Thermal Resistance (2)	$R_{\theta JA}$/ $R_{\theta JC}$	40/16							°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

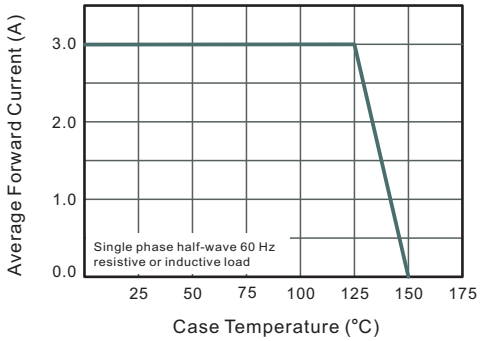


Fig.2 Typical Reverse Characteristics

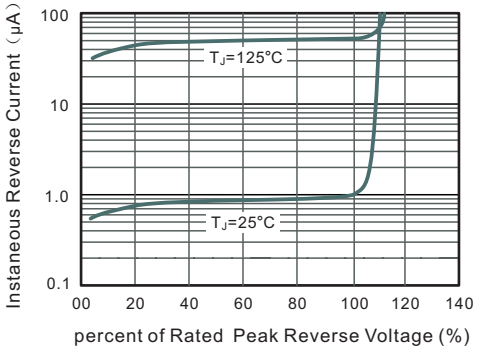


Fig.3 Typical Forward Characteristic

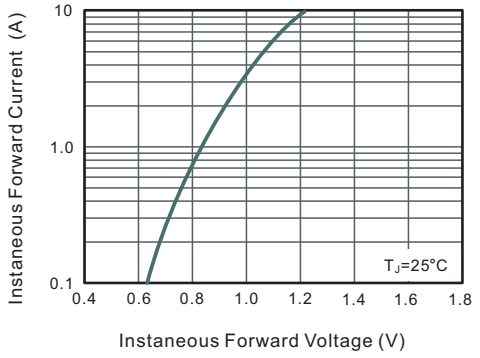


Fig.4 Typical Junction Capacitance

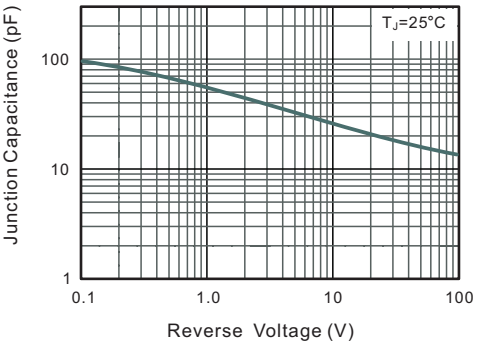


Fig.6 Maximum Non-Repetitive Peak Forward Surage Current

