HFZT

S5AC ------- S5MC

PLASTIC SILICON RECTIFIERS

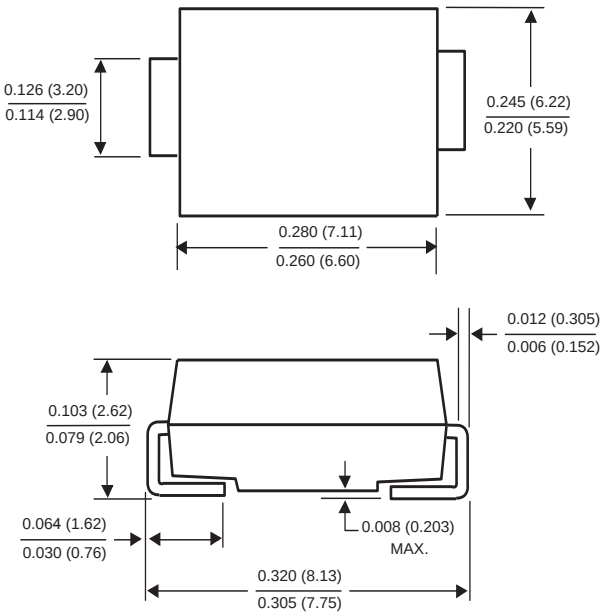
VOLTAGE RANGE: 50 --- 1000 V
CURRENT: 5.0 A

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: SMC molded plastic body over passivated chip
Terminals:Solder plated, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end



Maximum Ratings and Electrical characteristics

@ 25°C Ambient Temperature (unless otherwise noted)Single phase,half wave,60 Hz,resistive or inductive load.For capacitive load,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	$I_{F(AV)}$	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.

RATINGS AND CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

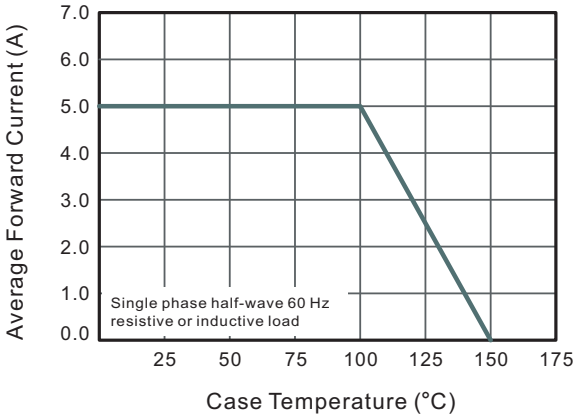


Fig.2 Typical Reverse Characteristics

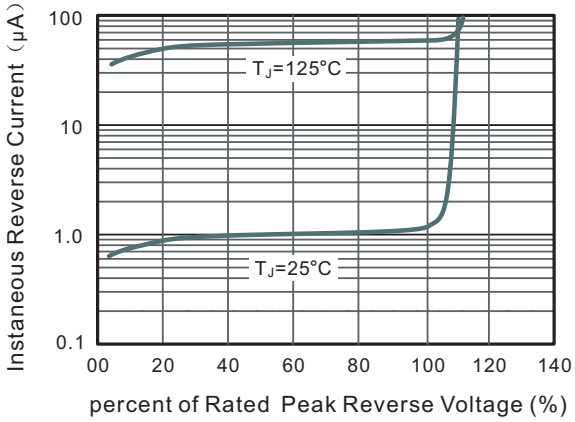


Fig.3 Typical Forward Characteristic

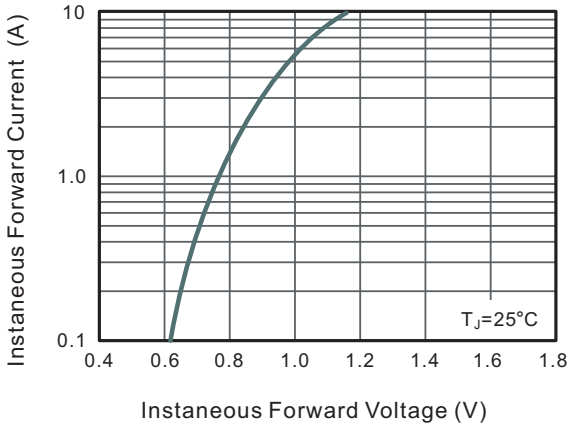


Fig.4 Typical Junction Capacitance

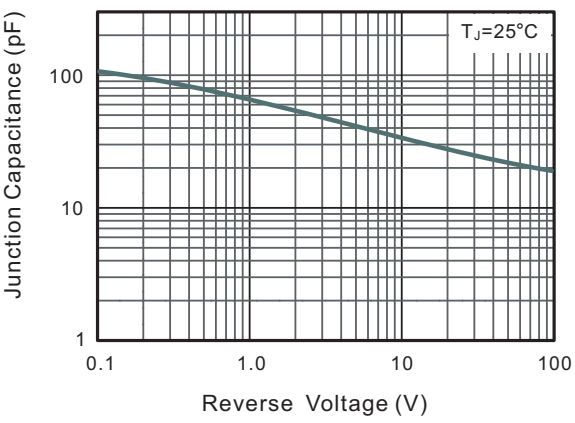


Fig.6 Maximum Non-Repetitive Peak Forward Surage Current