RS5AC THRU RS5MC

Features

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

Simplified outline SMC and symbol

Mechanical Data

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

Pinning

PIN	DESCRIPTION
1	Cathode
2	Anode

Absolute Maximum Ratings And Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified.

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

Parameter	Symbols	RS5AC	RS5BC	RS5DC	RS5GC	RS5JC	RS5KC	RS5MC	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 Tc = 125 °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 Forward Voltage at 1 A	V_F	1.3							V
Maximum DC Reverse Current Ta = 25 °C at Rated DC Blocking Voltage Ta =125 °C	I_R	5 100							μA
Typical Junction Capacitance at VR=4V f=1M	C_j	50							pF
Maximum Reverse Recovery Time(1)	t_{rr}	150				250	500		ns
Typical Thermal Resistance (2)	$R_{\theta JA}$ $R_{\theta JC}$	35 13							℃/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150							℃

（1）Measured with IF = 0.5 A, IR = 1 A, Irr = 0.25 A

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

Rating And Characteristic Curves

Fig.1 Maximum Average Forward Current Rating

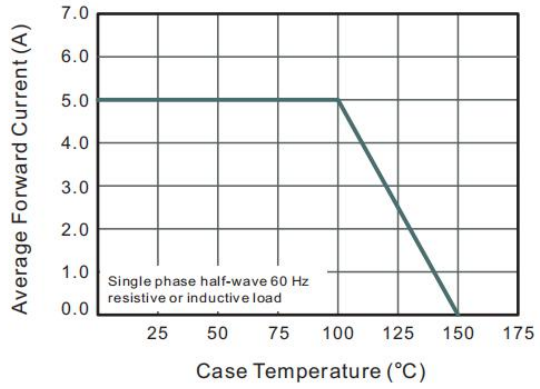


Fig.2 Typical Reverse Characteristics

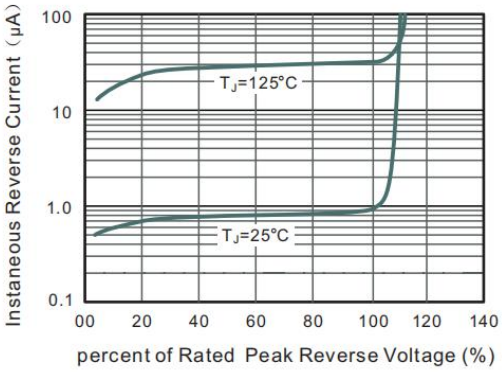


Fig.3 Typical Instaneous Forward Characteristics

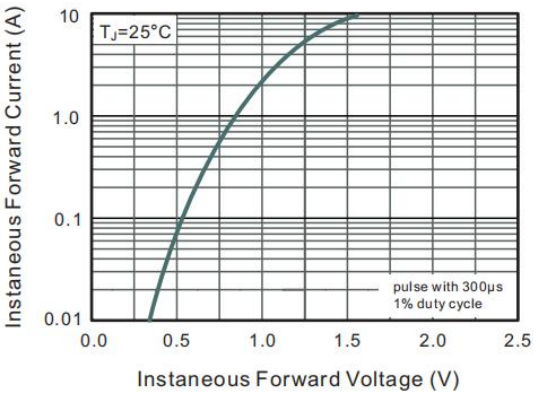


Fig.4 Typical Junction Capacitance

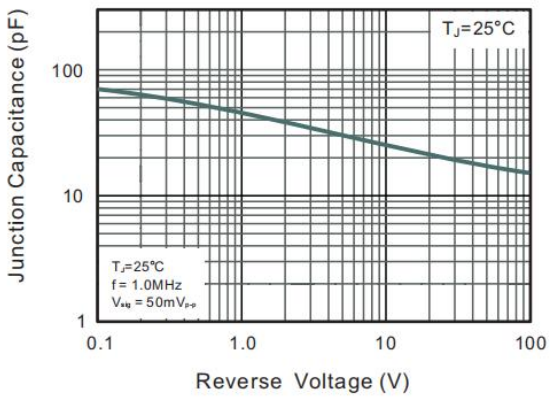
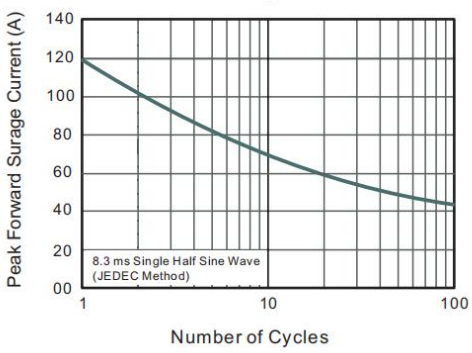


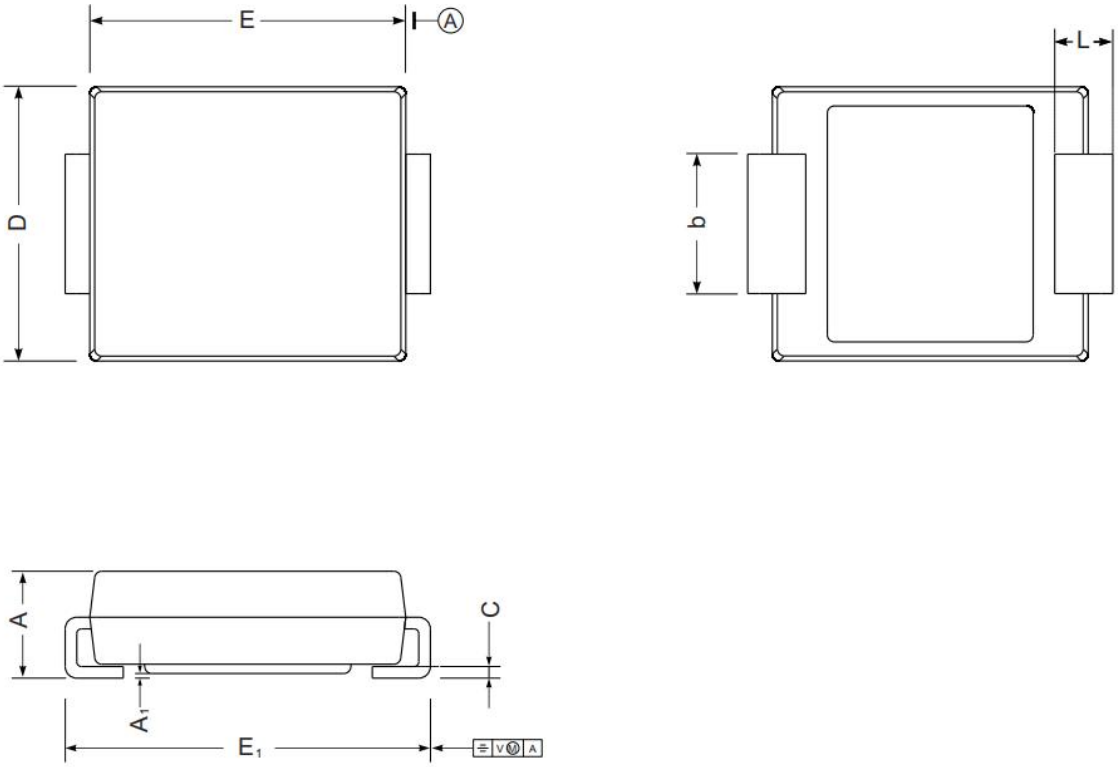
Fig.5 Maximum Non-Repetitive Peak

Forward Surage Current



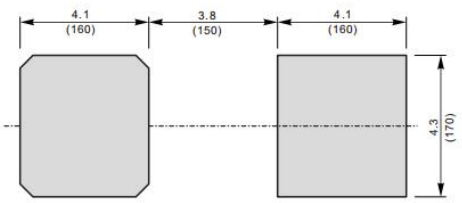
Package Outline

Plastic surface mounted package; 2 leads SMC



UNIT		A	C	D	E_1	A_1	L	b	E
mm	max	2.62	0.31	6.2	8.0	0.21	1.6	3.25	7.0
	min	2.00	0.15	5.6	7.6	0.05	0.9	2.75	6.5
mil	max	103	15	244	315	8.3	63	128	276
	min	79	6.9	220	299	2.0	35	108	256

The recommended mounting pad size



Unit : mm (mil)