

RS5AB~RS5MB

ROHS

Surface Mount Fast Recovery Rectifiers

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

Mechanical Data

- ◆ Case: SMB
- ◆ Quantity Per Reel : 3,000pcs
- ◆ Approx. Weight : 0.095g / 0.003oz
- ◆ Terminals: Solderable per MIL-STD-750, Method 2026

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

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

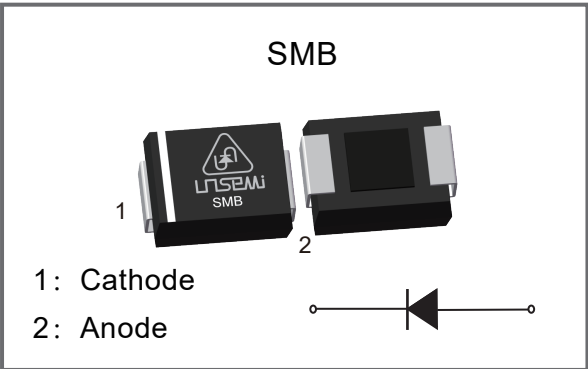
Parameter		Symbol	RS5AB	RS5BB	RS5DB	RS5GB	RS5JB	RS5KB	RS5MB	Units
Maximum Repetitive Peak Reverse Voltage		VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage		VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage		VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current		IF(AV)	5.0							A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load		IFSM	120							A
Maximum Forward Voltage at 5A		VF	1.3							V
Maximum DC Reverse Current at Rated DC Reverse Voltage	Ta=25℃	IR	10							μA
	Ta=125℃	IR	150							
Typical Junction Capacitance at VR=4V, f=1MHz		Cj	45							pF
Maximum Reverse Recovery Time ⁽¹⁾		trr	150				250	500		nS
Typical Thermal Resistance ⁽²⁾		RθJA	48							℃/W
		RθJC	16							℃/W
Operating and Storage Temperature Range		TJ,Tstg	-55 ~ +150							℃

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

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



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Electrical Characteristics Curves

Fig.1 Maximum Average Forward Current Rating

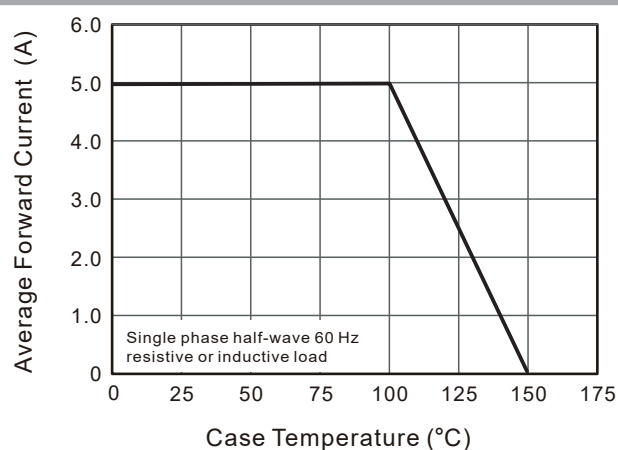


Fig. 2 Typical Reverse Characteristics

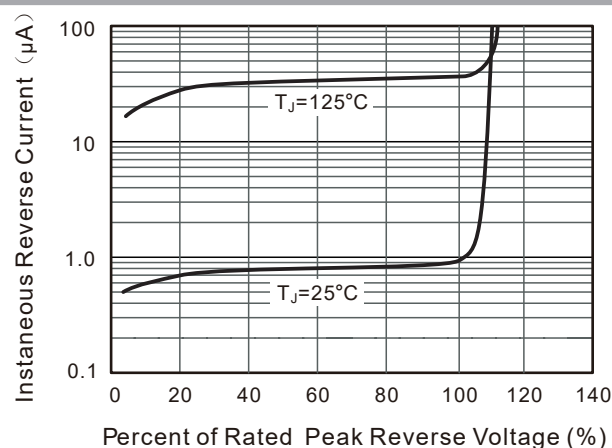


Fig.3 Typical Instantaneous Forward Characteristics

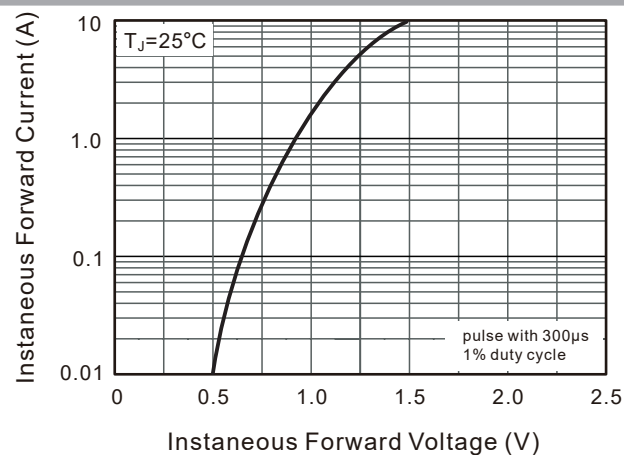


Fig. 4 Typical Junction Capacitance

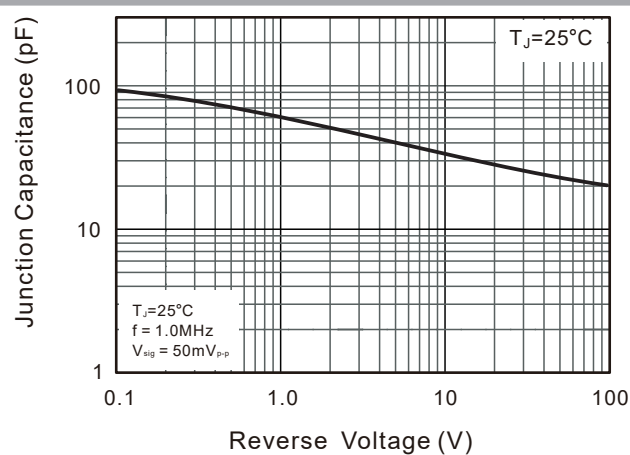
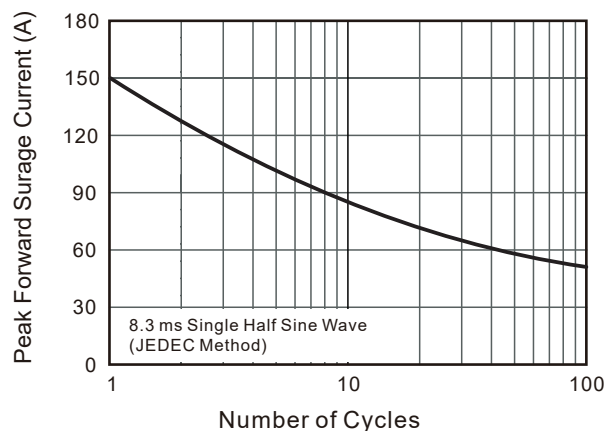
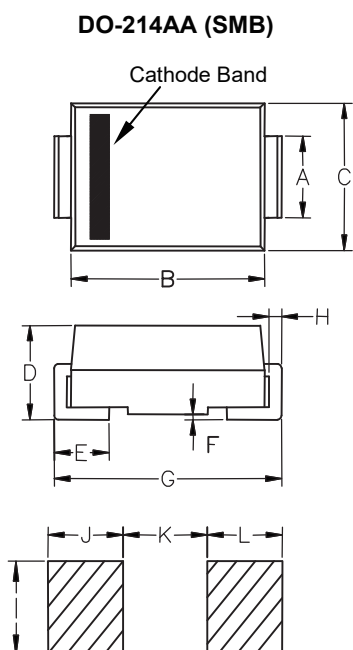


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



Package Outline & Dimensions



Dimensions	Inches		Millimeters	
	Min.	Max.	Min.	Max.
A	0.077	0.087	1.960	2.200
B	0.171	0.191	4.350	4.850
C	0.130	0.155	3.300	3.940
D	0.084	0.096	2.130	2.440
E	0.030	0.060	0.750	1.520
F	-	0.008	-	0.203
G	0.201	0.216	5.100	5.500
H	0.006	0.012	0.152	0.305
I	0.089	-	2.260	-
J	0.085	-	2.160	-
K	-	0.107	-	2.740
L	0.085	-	2.160	-

Marking

Type Number	RS5AB	RS5BB	RS5DB	RS5GB	RS5JB	RS5KB	RS5MB
Making	RS5A	RS5B	RS5D	RS5G	RS5J	RS5K	RS5M

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