General Purpose Silicon Rectifiers

S2AB ~ S2MB

■ Features

- Reverse Voltage - 50 to 1000 V
- Forward Current - 2 A
- For surface mounted applications
- Low profile package
- Glass Passivated Chip Junction
- Easy to pick and place

SMB

Top View
Simplified outline SMB and Symbol

PIN DESCRIPTION

PIN	DESCRIPTION
1	Cathode
2	Anode

■ Maximum Ratings and Electrical characteristics

Ratings at 25℃ ambient temperature unless otherwise specified.

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

Parameter	Symbols	S2AB	S2BB	S2DB	S2GB	S2JB	S2KB	S2MB	Unit
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	
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	
Maximum Instantaneous Forward Voltage at I_F=2A	V_F	1.1							
Maximum Averaged Forward Rectified Current	I_{FAV}	2							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	60							
Maximum DC Reverse Current T_A=25℃ at rated DC blocking voltage T_A=125℃	I_R	5 100							μA
Typical Junction Capacitance *1	C_j	25							pF
Typical Thermal Resistance *2	$R_{\theta JA}$ $R_{\theta JC}$	60 20							℃/W
Junction Temperature	T_j	150							℃
Storage Temperature	T_{stg}	-55 to 150							

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

* 2 P.C.B. mounted with 0.2″ ×0.2″ (5×5mm) copper pad areas.

■ Marking

NO.	S2AB	S2BB	S2DB	S2GB	S2JB	S2KB	S2MB
Marking	S2A	S2B	S2D	S2G	S2J	S2K	S2M

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■ Typical Characterisitics

Fig.1 Forward Current Derating Curve

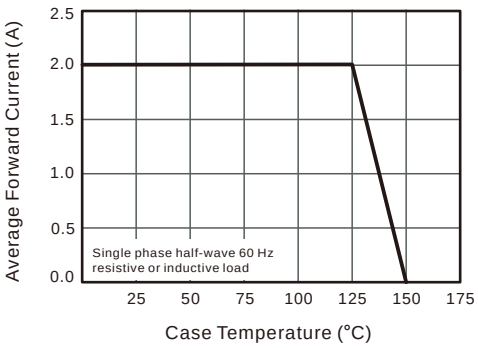


Fig.2 Typical Instaneous Reverse Characteristics

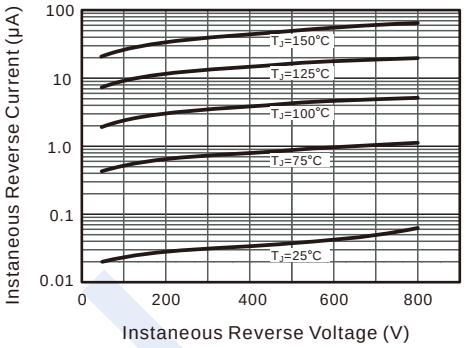


Fig.3 Typical Forward Characteristic

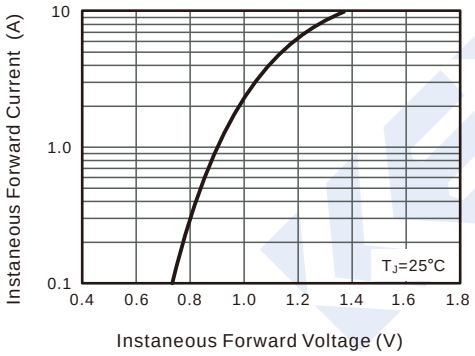


Fig.4 Typical Junction Capacitance

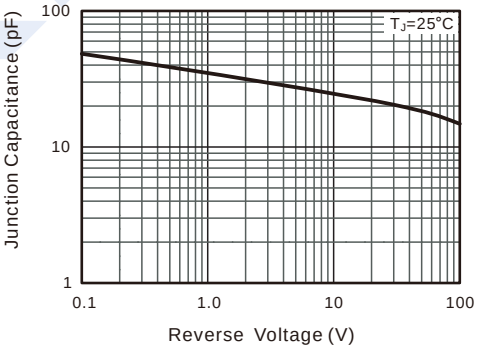
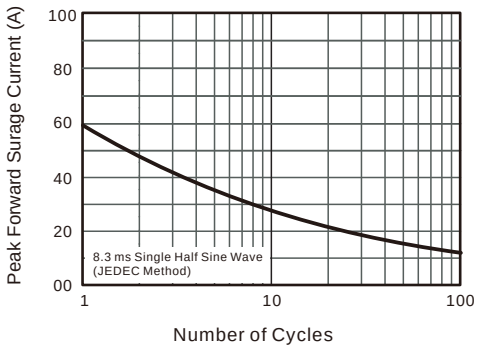


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current



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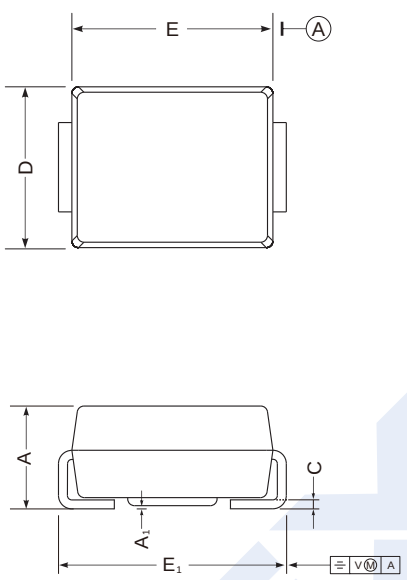
■ Package Outline Dimensions

Plastic surface mounted package; 2 leads SMB



SMB mechanical data

UNIT		A	E	D	E_1	A_1	L	C	b
mm	max	2.44	4.70	3.94	5.59	0.20	1.5	0.305	2.2
	min	2.13	4.06	3.3	5.08	0.05	0.8	0.152	1.9
mil	max	96	185	155	220	7.9	59	12	87
	min	84	160	130	200	2.0	32	6	75

■ The Recommended Mounting Pad Size