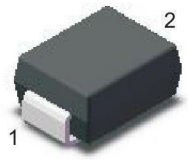
S3AB–TN~S3MB–TN
Surface Mount General Purpose Silicon Rectifiers

Features

- Glass Passivated Chip Junction
- For Surface Mounted Applications
- Low profile package
- Easy to Pick and Place

SMB



1.Cathode — 2.Anode

Marking Code:

S3AB–TN: S3A
S3BB–TN:S3B
S3DB–TN: S3D
S3GB–TN: S3G
S3JB–TN: S3J
S3KB–TN:S3K
S3MB–TN: S3M

Maximum Ratings and Electrical Characteristics

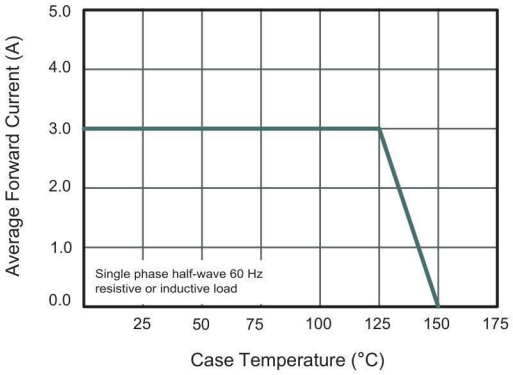
Ratings at 25℃ ambient temperature unless otherwise specified. Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

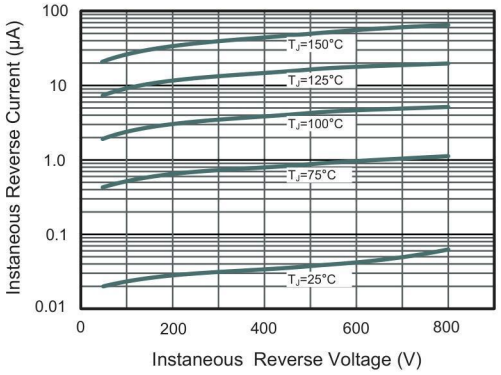
Parameter	Symbols	S3AB–TN	S3BB–TN	S3DB–TN	S3GB–TN	S3JB–TN	S3KB–TN	S3MB–TN	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	3.0							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 3 A	V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage T_A = 25 °C T_A = 125 °C	I_R	5 100							μA
Typical Junction Capacitance Note1	C_j	35							pF
Typical Thermal Resistance Note2	$R_{\theta JA}$ $R_{\theta JC}$	48 16							°C/W
Junction Temperature	T_J	150							°C
Storage Temperature Range	T_{STG}	-55 to +150							°C

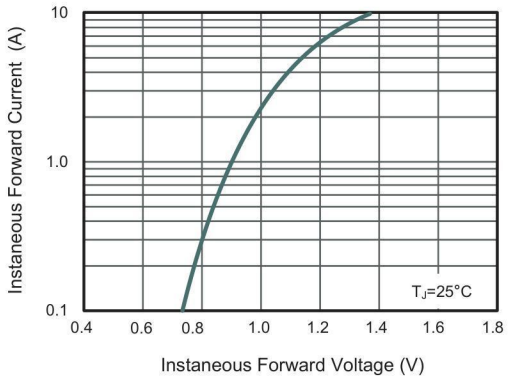
Note:

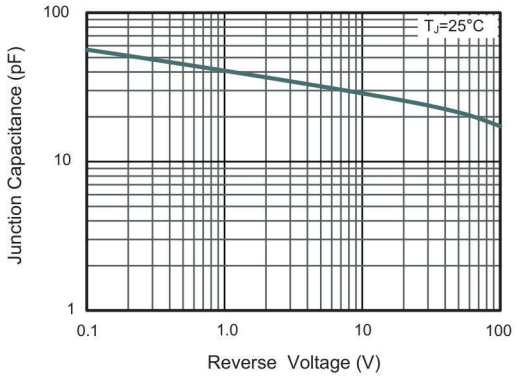
1. Measured at 1 MHz and applied reverse voltage of 4 V D.C
2. P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

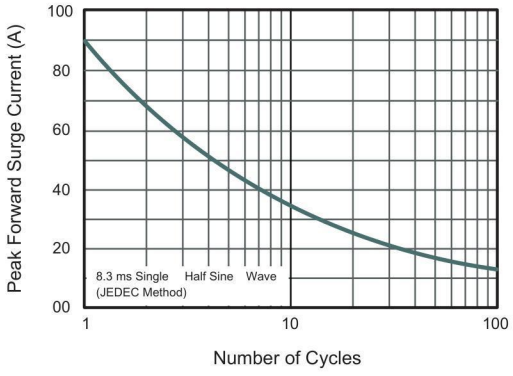
Typical Characteristic Curves







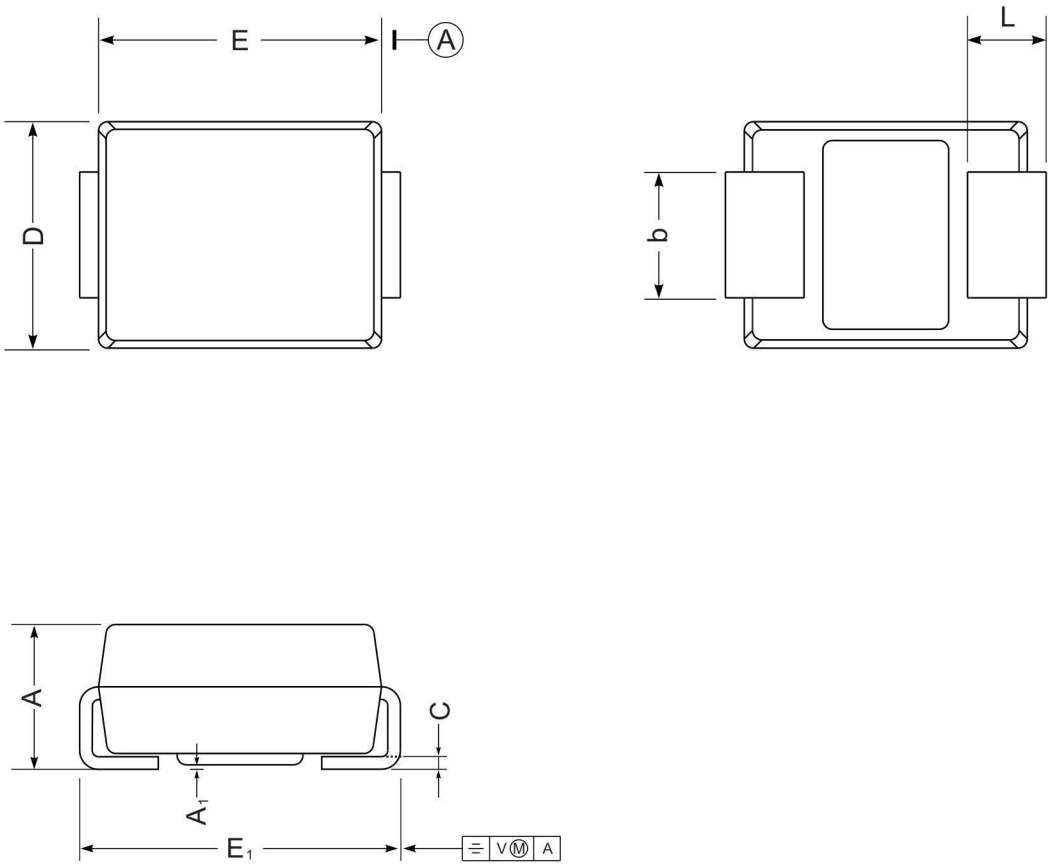




Package Outline

SMB

Dimensions in mm



UNIT		A	E	D	E1	A1	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