

Rev.A Apr.-2018

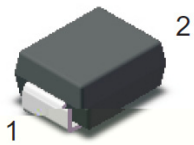
50V ~ 1000V 3.0A SMB

Surface Mount General Purpose Silicon Rectifiers, Reverse Voltage 50 to 1000V, Forward Current: 3.0A, SMB package.

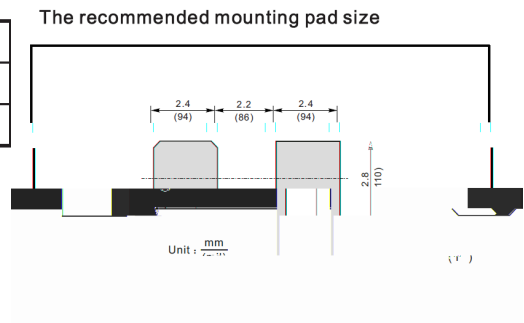
RoHS 2011/65/EU

Glass Passivated Chip Junction, Lead free in comply with EU RoHS 2011/65/EU directives, For surface mounted applications. Halogen free product.

General purpose.



PIN	DESCRIPTION
1	Cathode
2	Anode



See Marking Instructions.

Parameter	Symbol	Rating							Unit
		S3AB	S3BB	S3DB	S3GB	S3JB	S3KB	S3MB	
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
Typical Junction Capacitance at $V_R=4V$ $f=1MHz$	$C_j$	35							pF
Typical Thermal Resistance <sup>1</sup>	$R_{\theta JA}$	48							/W
	$R_{\theta JC}$	16							
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55~+150							

Note:

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

Parameter	Symbol	Test Conditions	Rating							Unit
			S3AB	S3BB	S3DB	S3GB	S3JB	S3KB	S3MB	
Maximum Instantaneous Forward Voltage	$V_F$	$I_F=3.0A$	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	$T_a=25$	5.0							$\mu A$
		$T_a=125$	100							$\mu A$

Fig.1 Forward Current Derating Curve

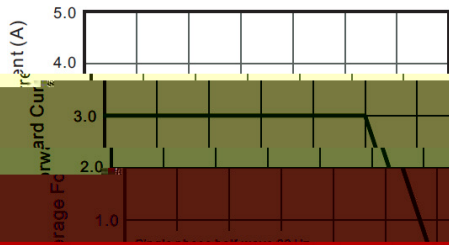
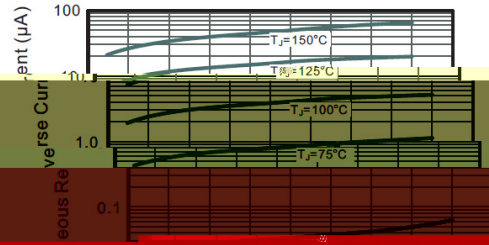
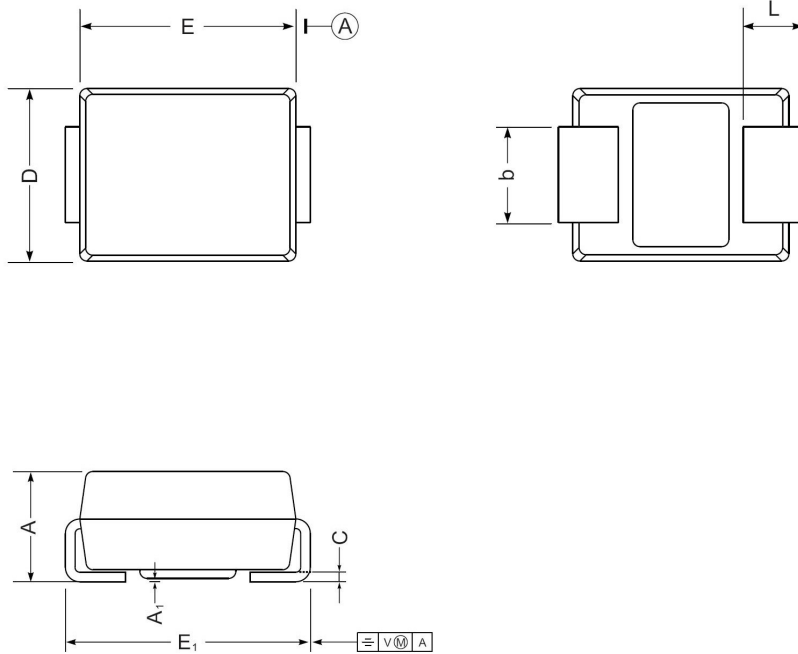


Fig.2 Typical Instantaneous Reverse Characteristics

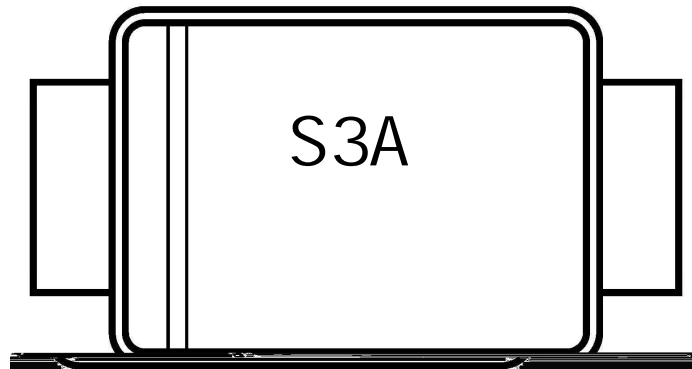


**SMB**


SMB mechanical data

UNIT		A	E	D	E <sub>1</sub>	A <sub>1</sub>	L	C	b
	max	2.44	4.70	3.94	5.59	0.20	1.50	0.305	2.27
mm	min	2.13	4.06	3.3	5.08	0.05	0.8	0.152	1.9
	max	96	185	155	220	7.9	59	12	87
mil	min	84	160	130	200	2.0	32	6	75

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S3A

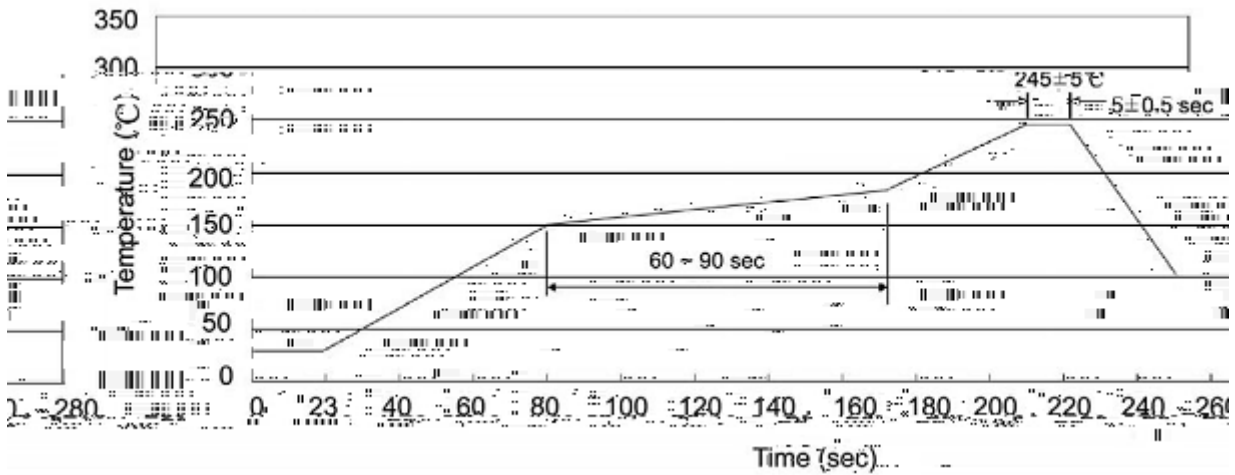
1 \*

3 \*

Note:

S3A Product Type Code

Lot No. Code The 1st \* means:YM Code The last 3 \* means:little Lot No Code

**Temperature Profile for IR Reflow Soldering(Pb-Free)**

**Note:**

- |   |       |     |       |          |   |
|---|-------|-----|-------|----------|---|
| 1 | 25    | 150 | 60    | 90sec;   | 1.Preheating:25~150 , Time:60~90sec.    |
| 2 | 245±5 |     | 5±0.5 | sec;     | 2.Peak Temp.:245±5 , Duration:5±0.5sec. |
| 3 |       |     | 2     | 10 /sec. | 3. Cooling Speed: 2~10 /sec.            |

260±5

10±1 sec.

Temp.:260±5

Time:10±1 sec

/ REEL

Package Type	Units					Dimension (unit mm <sup>3</sup> )		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
SMB	3000	5	15000	5	75000	7 ×11	185X180X105	390X385X205