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50V~1000V

3.0A SMB

Surface Mount General Purpose Silicon Rectifiers, Reverse Voltage 50 to1000V,Forward Current:3.0A ,SMB package.

RoHS 2011/65/EU

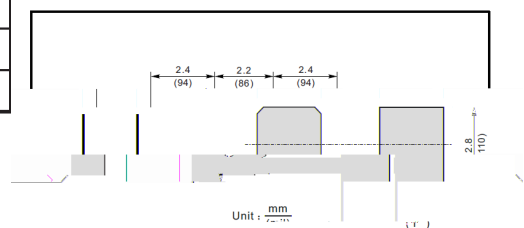
Glass Passivated Chip Junction, Lead free in comply with EU RoHS 2011/65/EU directives, For surface mounted applications. Halogen free product.

General purpose.



PIN	DESCRIPTION
1	Cathode
2	Anode

The recommended mounting pad size



See Marking Instructions.

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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 VR=4V f=1MHz	C _j	35							pF
Typical Thermal Resistance ¹	R _{θJA}	48							/W
	R _{θJC}	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							μA
		$T_a=125$	100							μA

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Fig.1 Forward Current Derating Curve

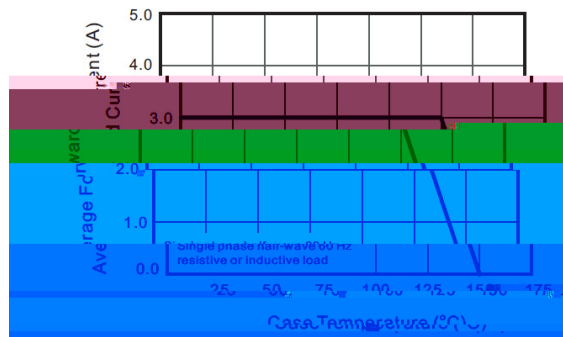


Fig.2 Typical Instantaneous Reverse Characteristics

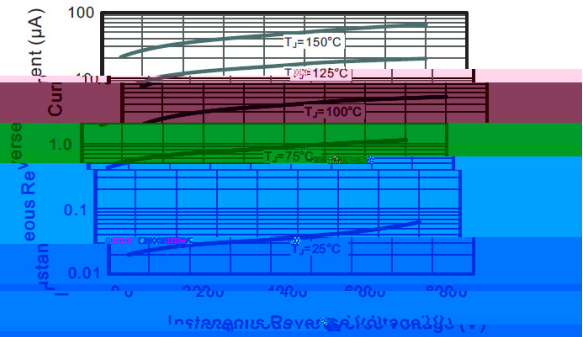


Fig.3 Typical Forward Characteristic

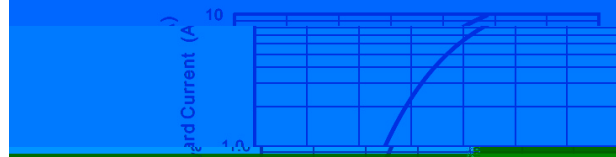
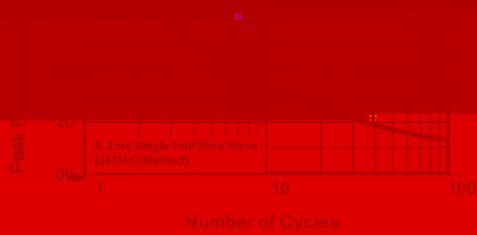
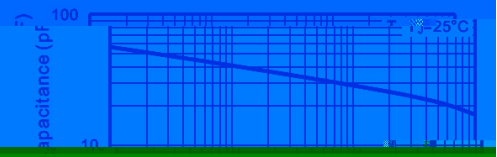
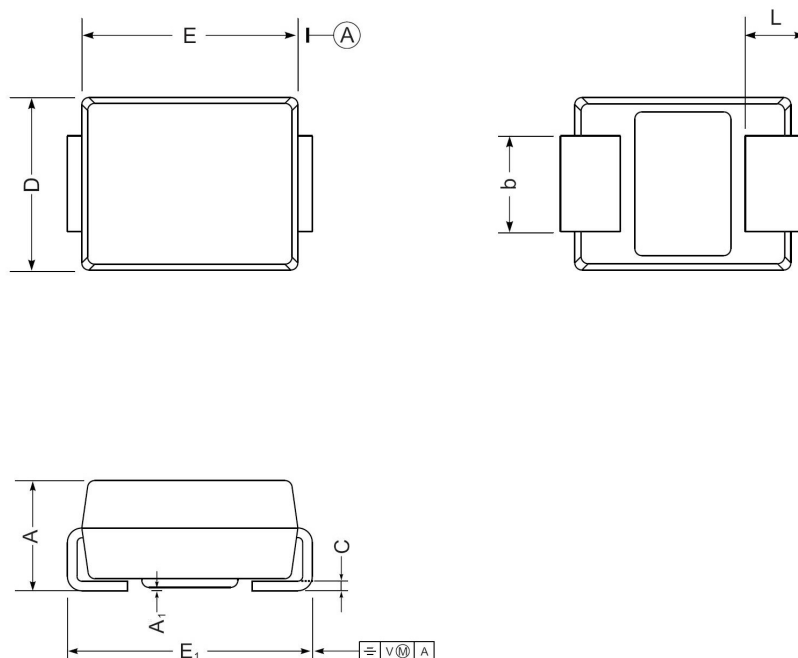


Fig.4 Typical Junction Capacitance



SMB



SMB mechanical data

UNIT		A	E	D	E ₁	A ₁	L	C	b
	max	2.44	4.70	3.94	5.59	0.20	1.50	0.305	2.2
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 *

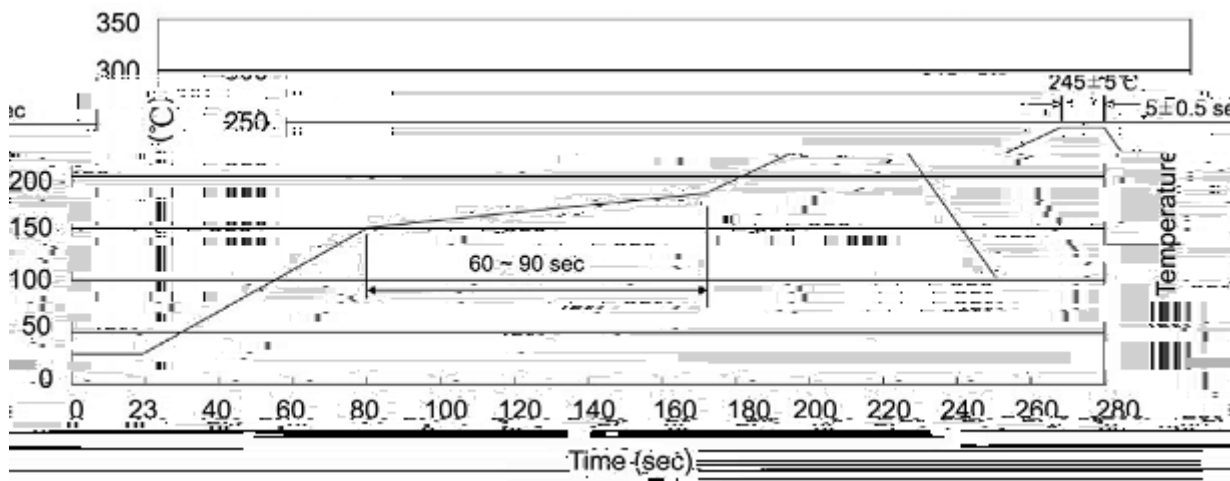
Note:

S3A Product Type Code

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

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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±0.5sec; | | 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
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/ REEL

Package Type	Units					Dimension (unit mm ³)		
	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