

/ Descriptions

50V~1000V

3.0A SMB

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

/ Features

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.

/ Applications

General purpose.

/ Equivalent Circuit

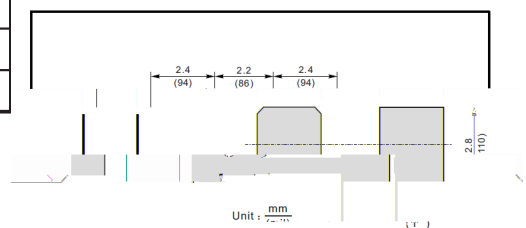


/ Pinning



PIN	DESCRIPTION
1	Cathode
2	Anode

The recommended mounting pad size



/ Marking

See Marking Instructions.

/ Absolute Maximum Ratings(Ta=25)

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.

/ Electrical Characteristics(Ta=25)

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

/ Electrical Characteristic Curve

Fig.1 Forward Current Derating Curve

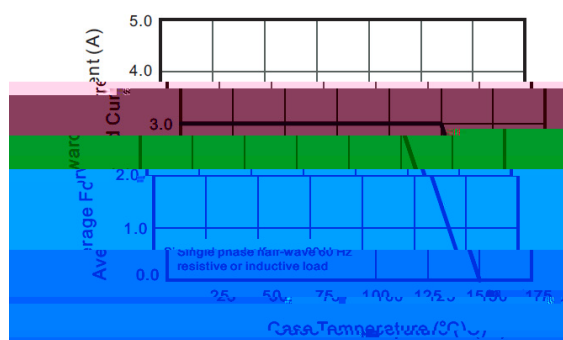


Fig.2 Typical Instantaneous Reverse Characteristics

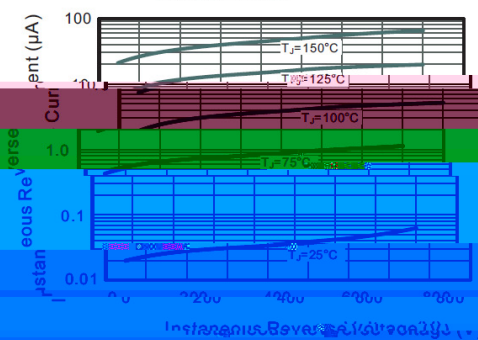


Fig.3 Typical Forward Characteristic

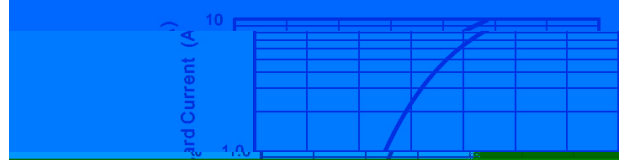
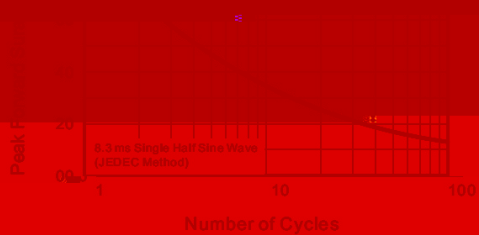
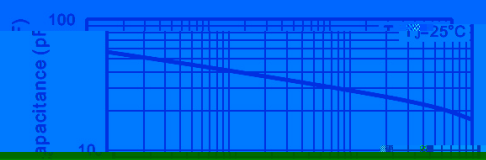
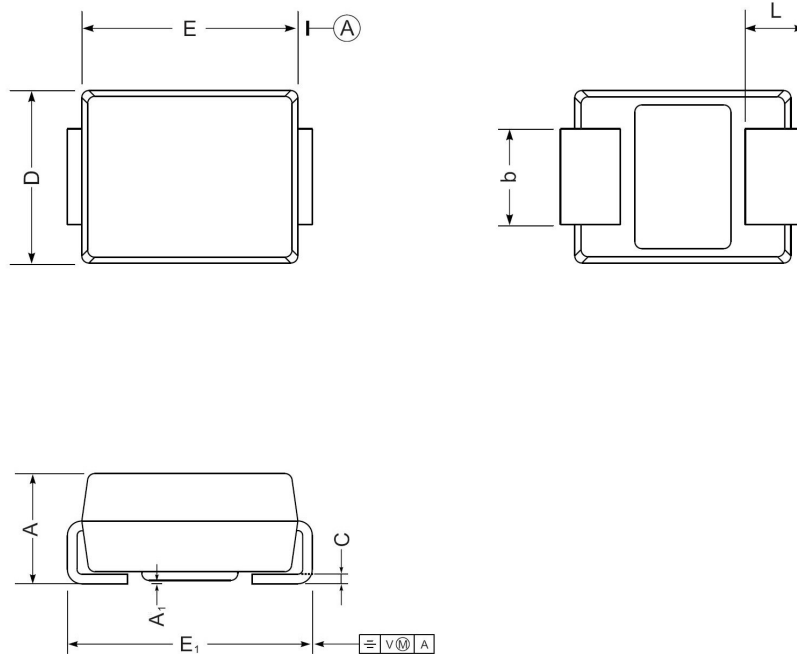


Fig.4 Typical Junction Capacitance



/ Package Dimensions

SMB



SMB mechanical data

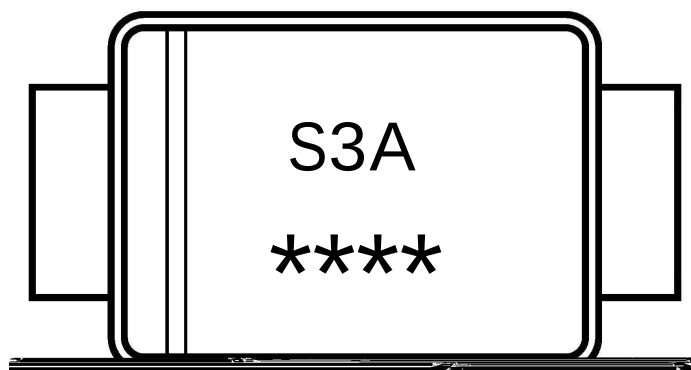
UNIT		A	E	D	E ₁	A ₁	L	C	b
	max	2.44	4.70	3.94	5.59	0.20	1.50	0.305	2.2
mm	min	2.13	4.06	3.3	5.08	0.05	0.8	0.152	1.9
	max	96	185	155	220	7.9	59	12	87
mil	min	84	160	130	200	2.0	32	6	75

S3AB~S3MB
Rev.A Apr.-2018



DATA SHEET

/ Marking Instructions



S3A

1 *

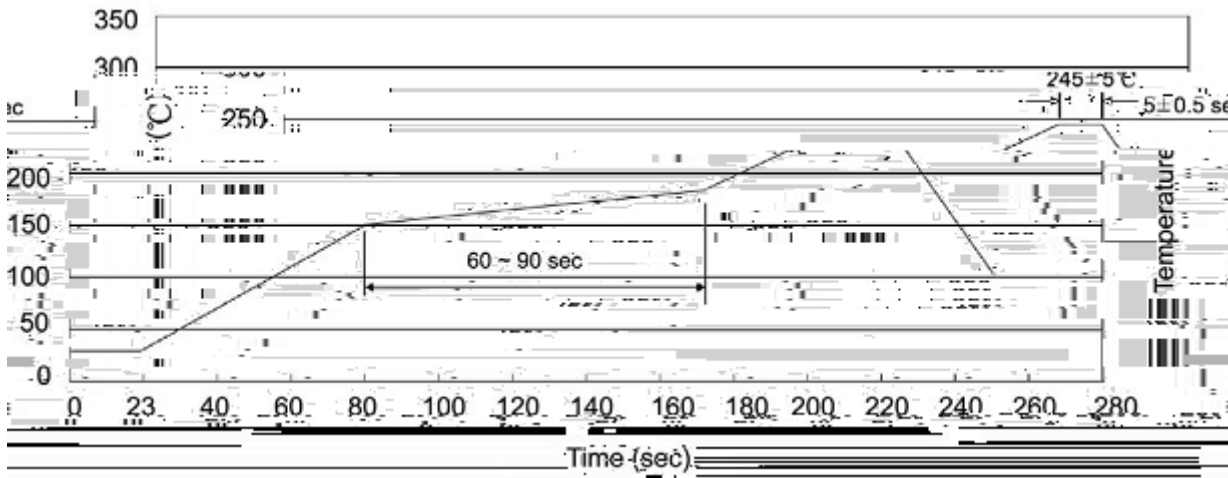
3 *

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±0.5sec; | 2.Peak Temp.:245±5 , Duration:5±0.5sec. |
| 3 | 2 10 | /sec. | 3. Cooling Speed: 2~10 /sec. |

/ Resistance to Soldering Heat Test Conditions

260±5 10±1 sec. Temp.:260±5 Time:10±1 sec

/ Packaging SPEC.

/ 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

/ Notices