

/ Descriptions

50V~1000V 2.0A SMAF

Surface Mount General Purpose Silicon Rectifiers, Reverse Voltage: 50 to 1000V, Forward Current: 2.0A, SMAF package.

/ Features

RoHS 2011/65/EU

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

/ Applications

General purpose.

/ Equivalent Circuit

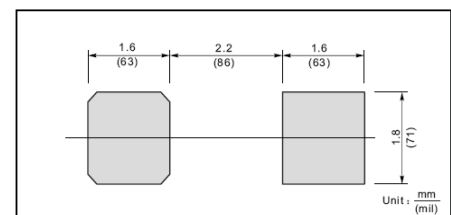


/ Pinning



PIN	DESCRIPTION
1	Cathode
2	Anode

The recommended mounting pad size



/ Marking

See Marking Instructions.

/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating							Unit
		S2AF	S2BF	S2DF	S2GF	S2JF	S2KF	S2MF	
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 at $T_c = 125$	$I_{F AV}$	2.0							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	50							A
Typical Junction Capacitance ¹	C_j	1000							

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.

Parameter	Symbol	Test condition	Rating	Unit
Maximum Instantaneous Forward Voltage	V_F	$I_F=2.0A$	1.1	V
Maximum DC Reverse Current at Maximum DC Blocking Voltage	I_R	$T_a=25$	5.0	uA
		$T_a=125$	100	

/ Electrical Characteristic Curve

Fig.1 Forward Current Derating Curve

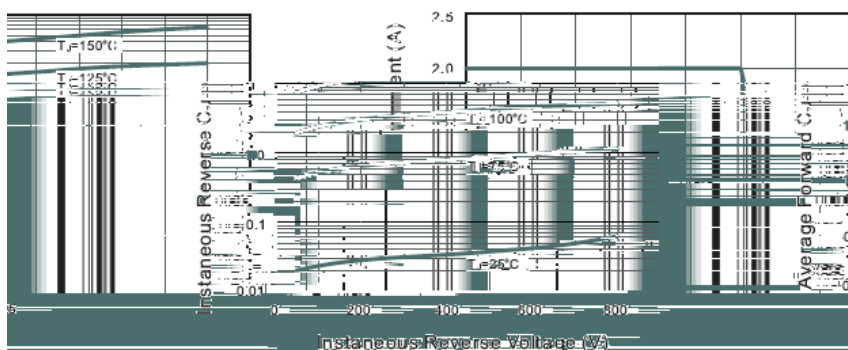


Fig.2 Typical Instantaneous Reverse

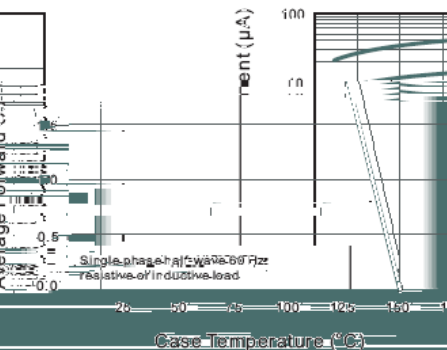


Fig.4 Typical Junction Capacitance

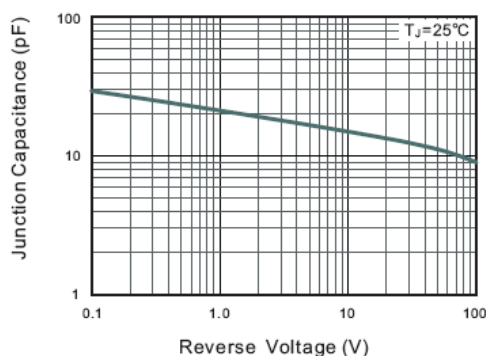


Fig.3 Typical Forward Characteristic

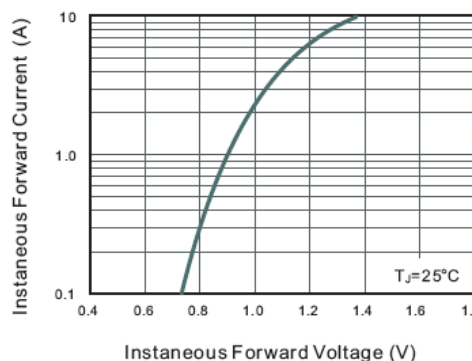
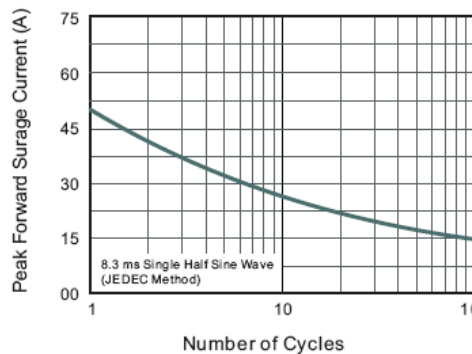
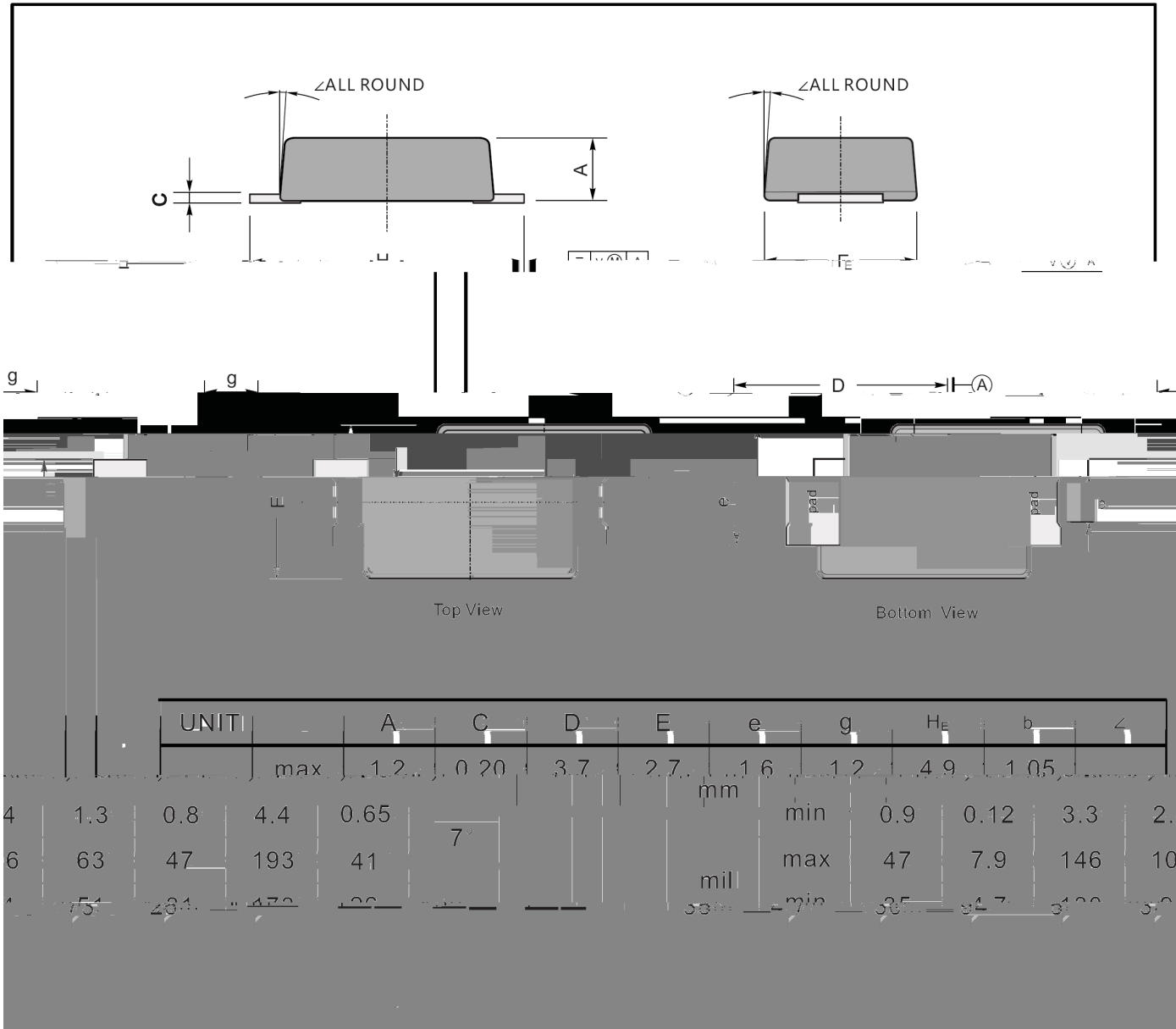


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

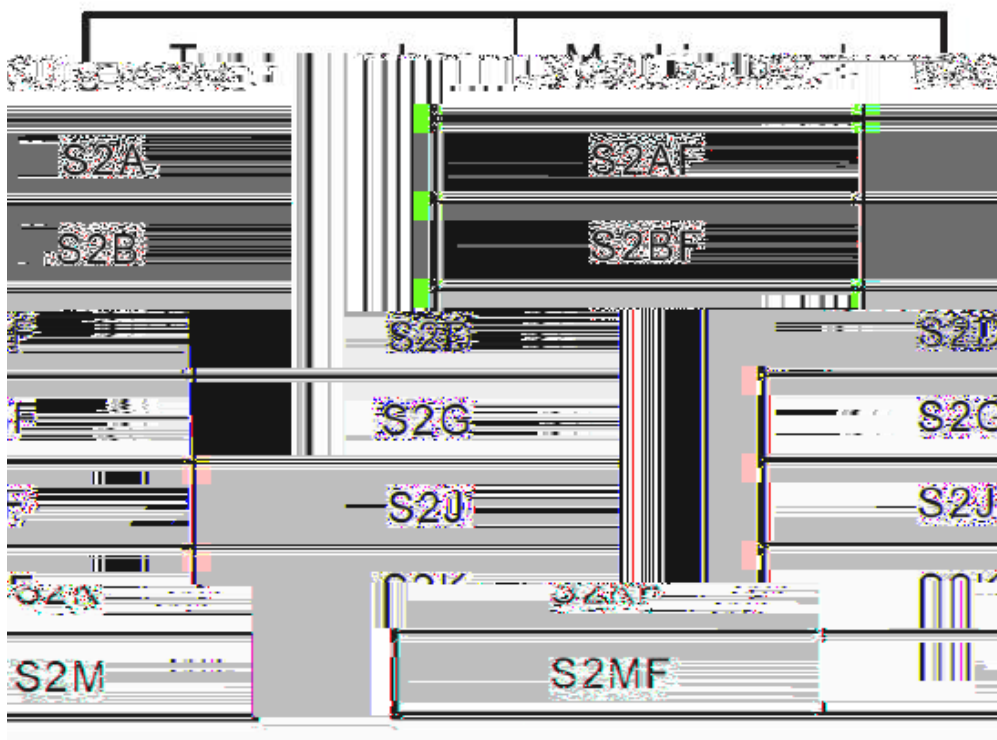


/ Package Dimensions



/ Marking Instructions

Marking



/ Marking Instructions



S2A

1 *

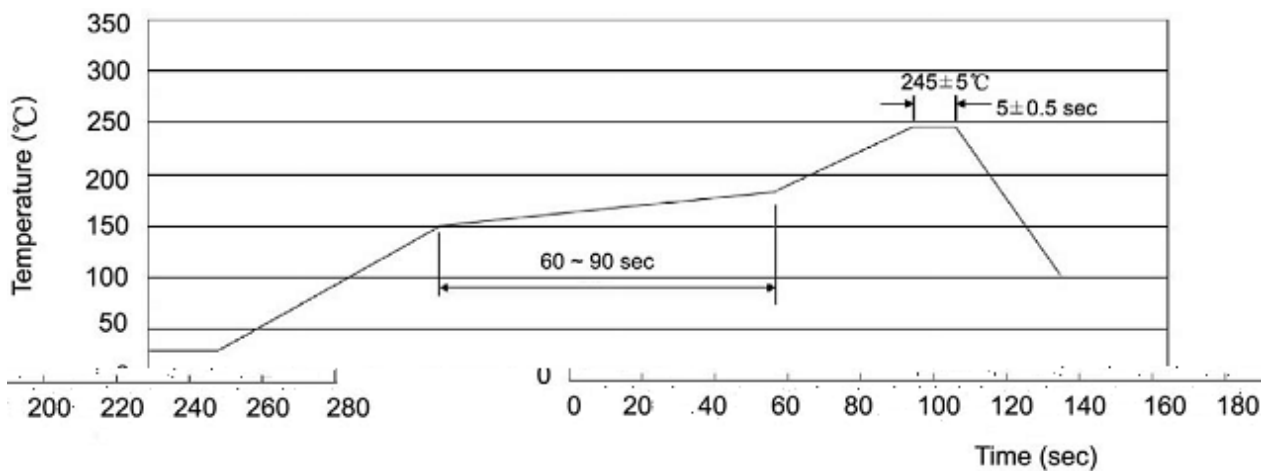
3 *

Note:

S2A 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 | 150 | 180 | 60 | 90sec; | 1.Preheating:150~180 , 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
SMAF	3000	5	15000	5	75000	7 ×11	185X180X105	390X385X205

/ **Notices**