

/ Descriptions

20V~200V

5.0A

SMAF

Surface Mount Schottky Barrier Rectifier, Reverse Voltage: 20 to 200V, Forward Current: 5.0A, SMAF thin package.

/ Features

Low power loss, high efficiency, High forward surge current capability, For use in low voltage, high frequency inverters, and polarity protection applications, For surface mounted applications. Halogen free product.

/ Applications

General purpose.

/ Equivalent Circuit

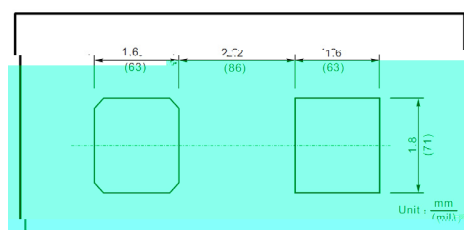


/ Pinning



PIN	DESCRIPTION
1	Cathode
2	Anode

The recommended mounting pad size



/ Marking

See Marking Instructions.

/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating								Unit
		SS52F	SS54F	SS56F	SS58F	SS510F	SS512F	SS515F	SS520F	
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	20	40	60	80	100	120	150	200	V
Maximum RMS voltage	V _{RMS}	14	28	42	56	70	84	105	140	V
Maximum DC Blocking Voltage	V _{DC}	20	40	60	80	100	120	150	200	V
Maximum Average Forward Rectified Current	I _{F (AV)}	5.0								A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	150								A
Typical Junction Capacitance ¹⁾	C _j	500		300						pF
Typical Thermal Resistance ²⁾	R _{θJA}	60								°C/W
Operating Junction Temperature Range	T _j	-55~+150								°C
Storage Temperature Range	T _{stg}	-55~+150								°C

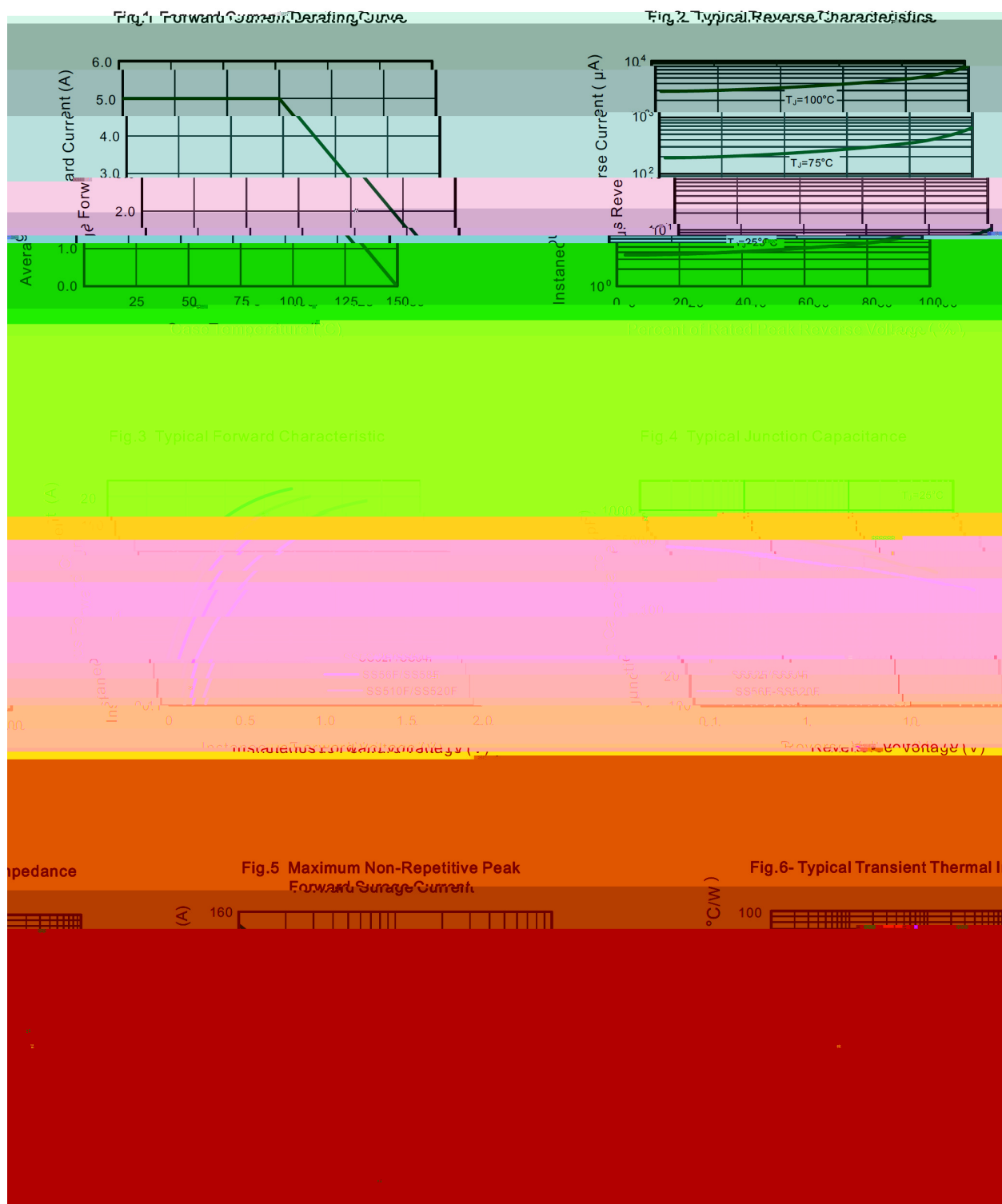
Note:

- 1 Measured at 1MHz 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.

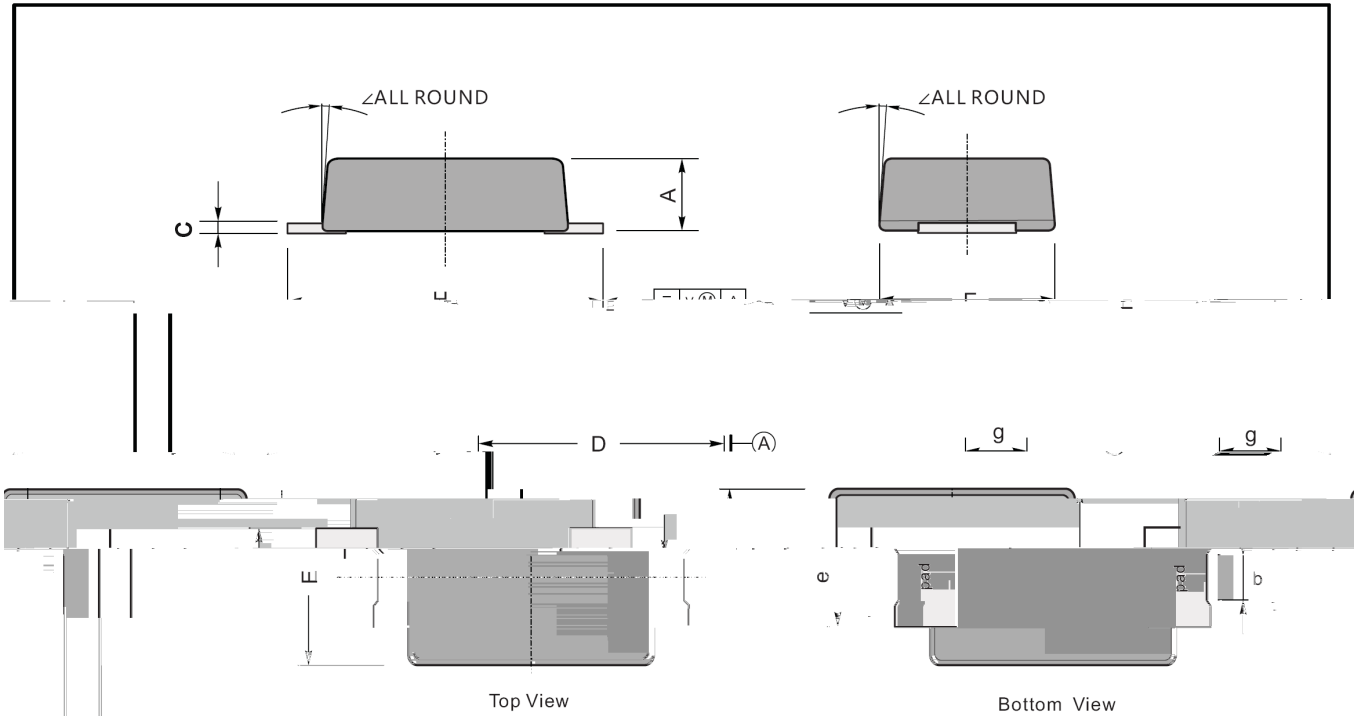
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test condition	Rating								Unit
			SS52F	SS54F	SS56F	SS58F	SS510F	SS512F	SS515F	SS520F	
Max Instantaneous Forward Voltage	V _F	I _F =5.0A	0.55		0.70		0.85				V
Maximum DC Reverse Current at Rated DC Reverse Voltage	I _R	T _a =25℃	1.0								mA
		T _a =100℃	50								

/ Electrical Characteristic Curve



/ Package Dimensions



UNIT				A	C	D	E	e	g	H _E	b	∠
max				1.2	0.20	3.7	2.7	1.6	1.2	4.9	1.05	
1.3	0.8	4.4	0.65	7°			mm	min	0.9	0.12	3.3	2.4
63	47	193	41				mil	max	47	7.9	146	106
1.3	0.8	4.4	0.65				mm	min	0.9	0.12	3.3	2.4
63	47	193	41				mil	max	47	7.9	146	106

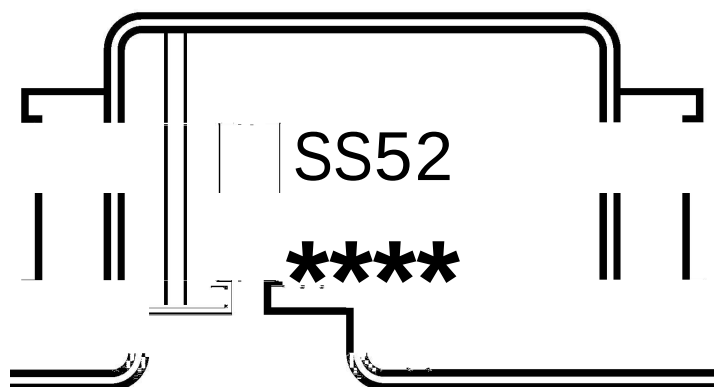
/ Marking Instructions

Marking

Type number	Marking code
SS52F	SS52
SS56F	SS56
SS58F	SS58
SS510F	SS510
SS512F	SS512
SS515F	SS515
SS520F	SS520



/ Marking Instructions



SS52

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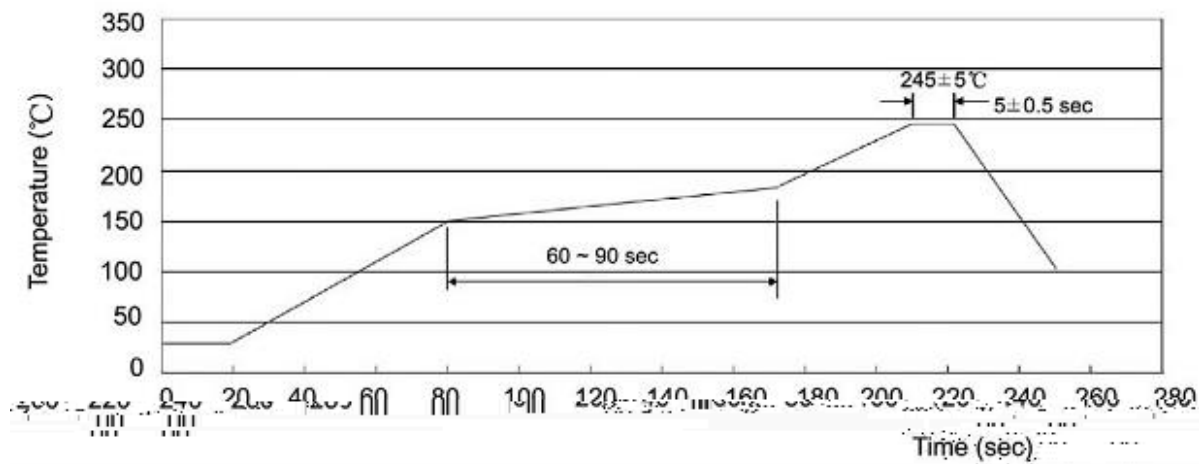
3 *

Note:

SS52 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