

/ Descriptions

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

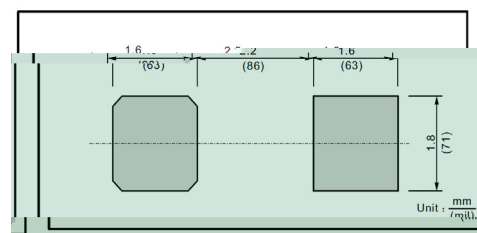


/ Pinning



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_{JA}	60								°C/W
Operating Junction Temperature Range	T_j	-55~+150								°C
Storage Temperature Range	T_{stg}	-55~+150								°C

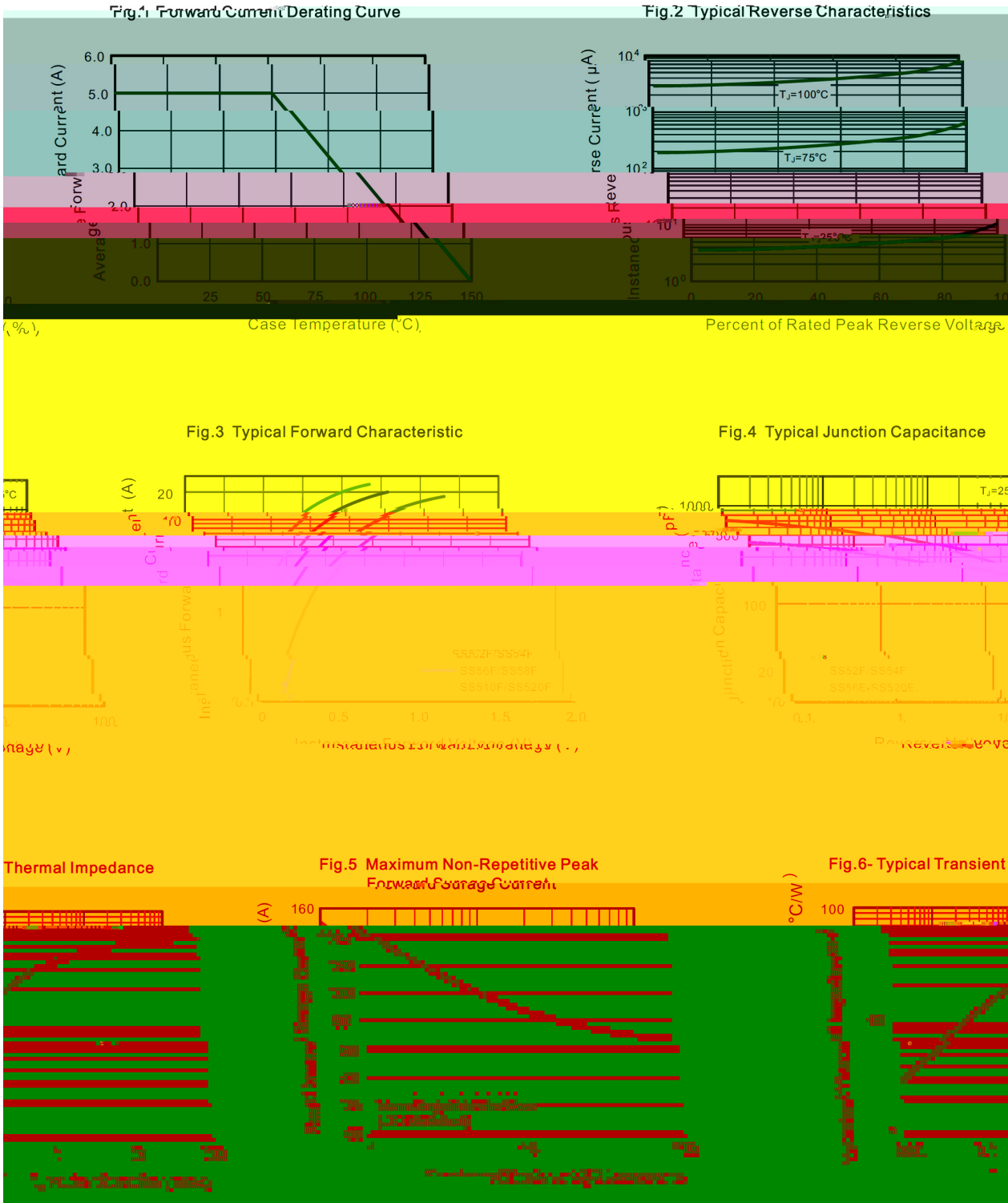
Note:

- 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.

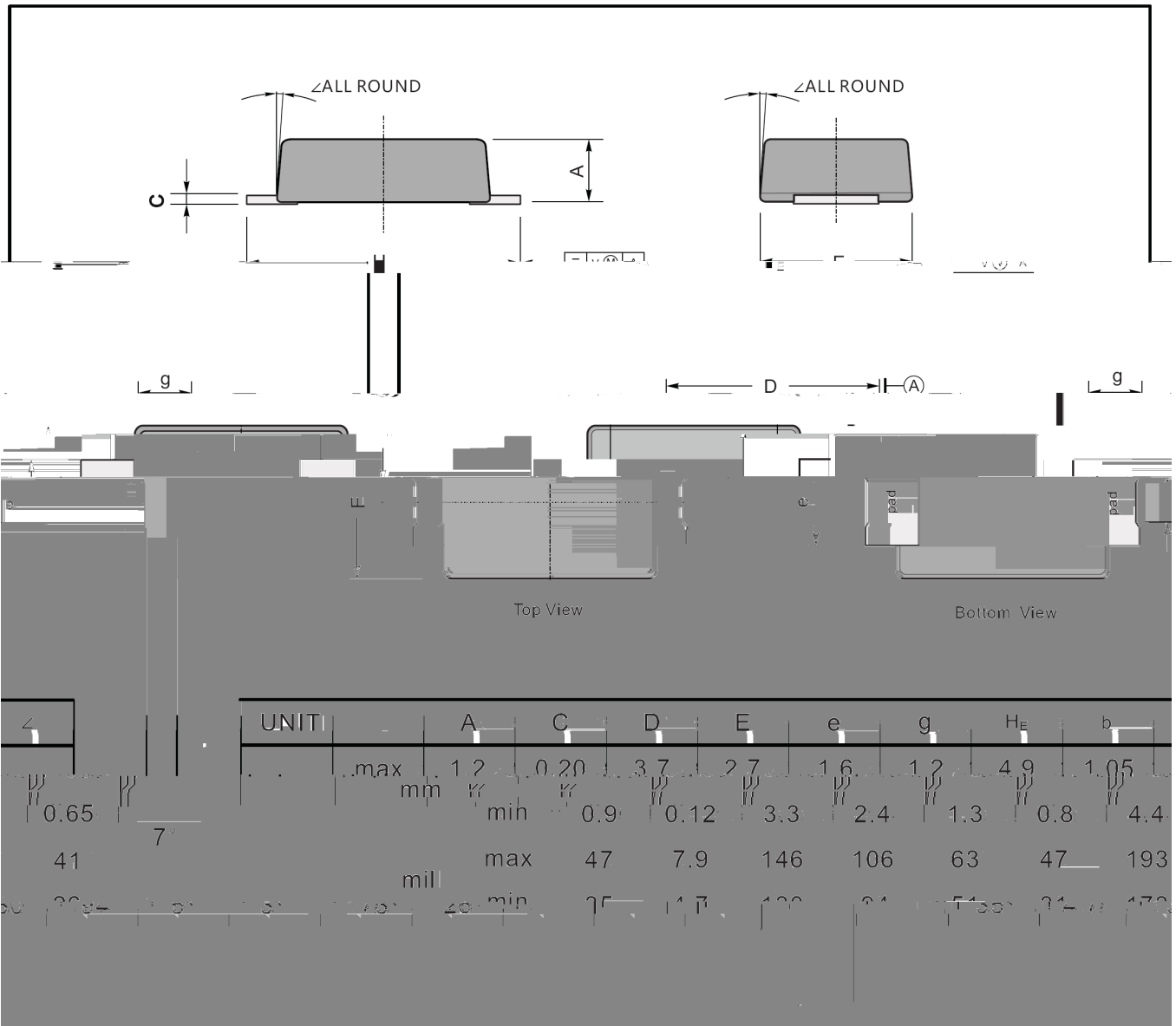
/ Electrical Characteristics(Ta=25)

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	$T_a=25^\circ C$	1.0								mA
		$T_a=100^\circ C$	50								

/ Electrical Characteristic Curve



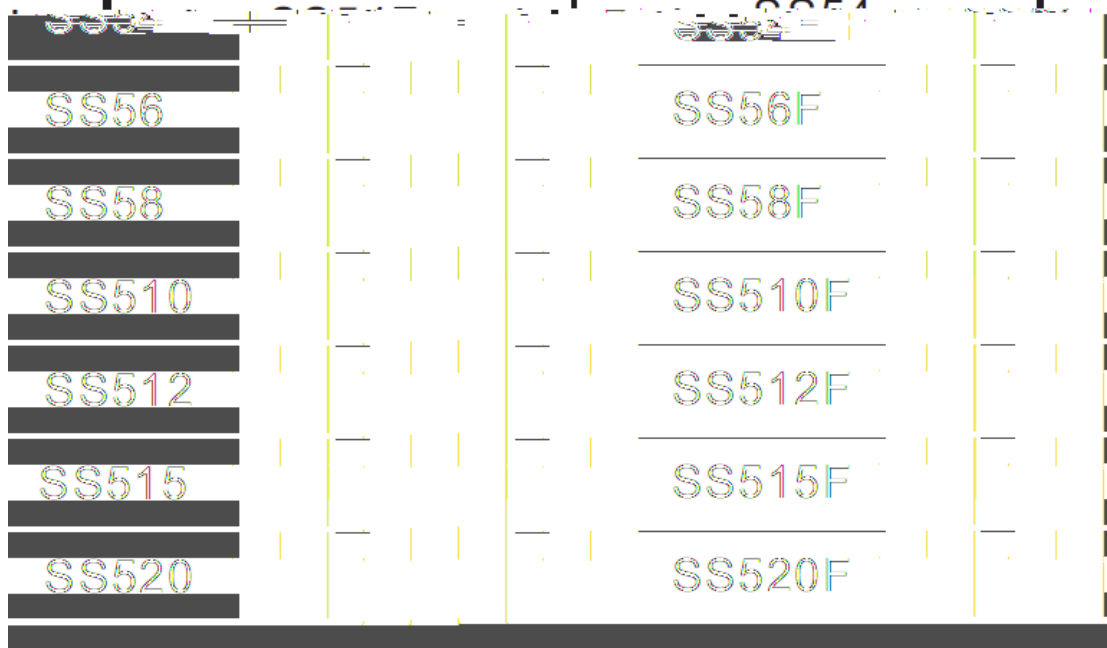
/ Package Dimensions



/ Marking Instructions

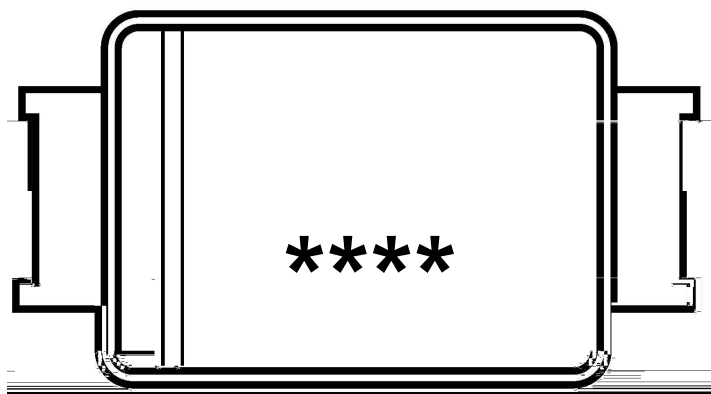
Marking

Type number	Marking code
SS52F	SS52
SS54F	SS54



SS56	SS56F
SS58	SS58F
SS510	SS510F
SS512	SS512F
SS515	SS515F
SS520	SS520F

/ Marking Instructions



SS52

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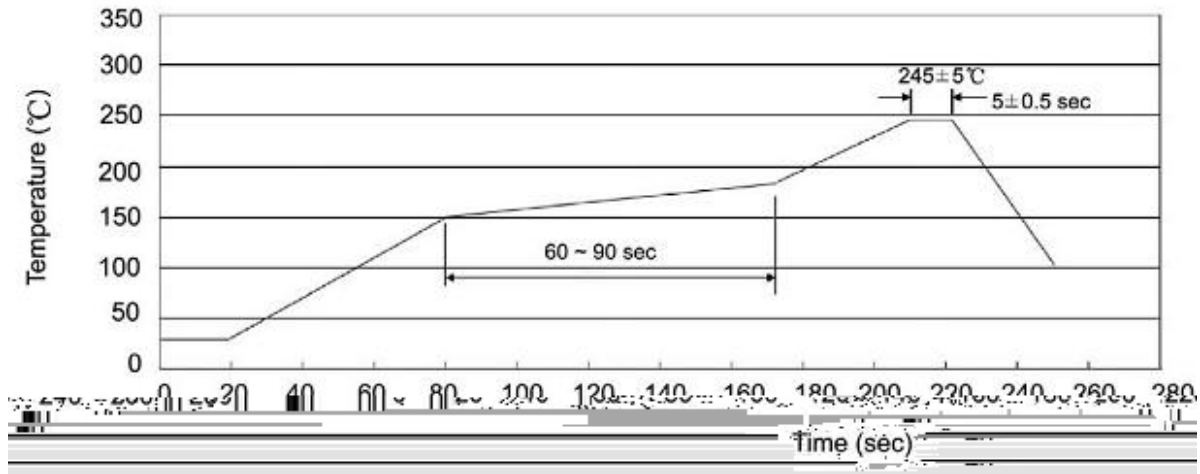
3 *

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" x11	185X180X105	390X385X205

/ Notices