

/ Descriptions

Surface Mount General Purpose Silicon Rectifiers, Reverse Voltage: 50 to 1000V, Forward Current: 3.0A, SMBF thin package.

/ Features

Glass Passivated Chip Junction, Lead free in comply with EU R0HS 2011/65/EU directives, For surface mounted applications. Halogen free product.

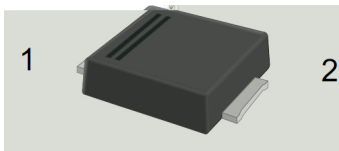
/ Applications

General purpose.

/ Equivalent Circuit

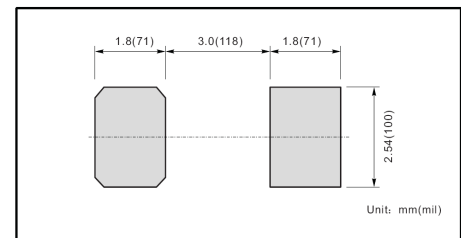


/ Pinning



PIN	DESCRIPTION
1	Cathode
2	Anode

The recommended mounting pad size



/ Marking

See Marking Instructions.

/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating							Unit
		S3ABF	S3BBF	S3DBF	S3GBF	S3JBF	S3KBF	S3MBF	
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 _a = 115	I _{F AV}	3.0							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}	100							A
Typical Junction Capacitance ¹	C _j	35							pF
Typical Thermal Resistance ²	R _{JA}	45							/W
	R _{JC}	15							
Operating and Storage Temperature Range	T _j , T _{stg}	-55~+150							

Note:

1) Measured at 1MHz and applied reverse voltage of 4V D.C

2) P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

/ Electrical Characteristics(Ta=25)

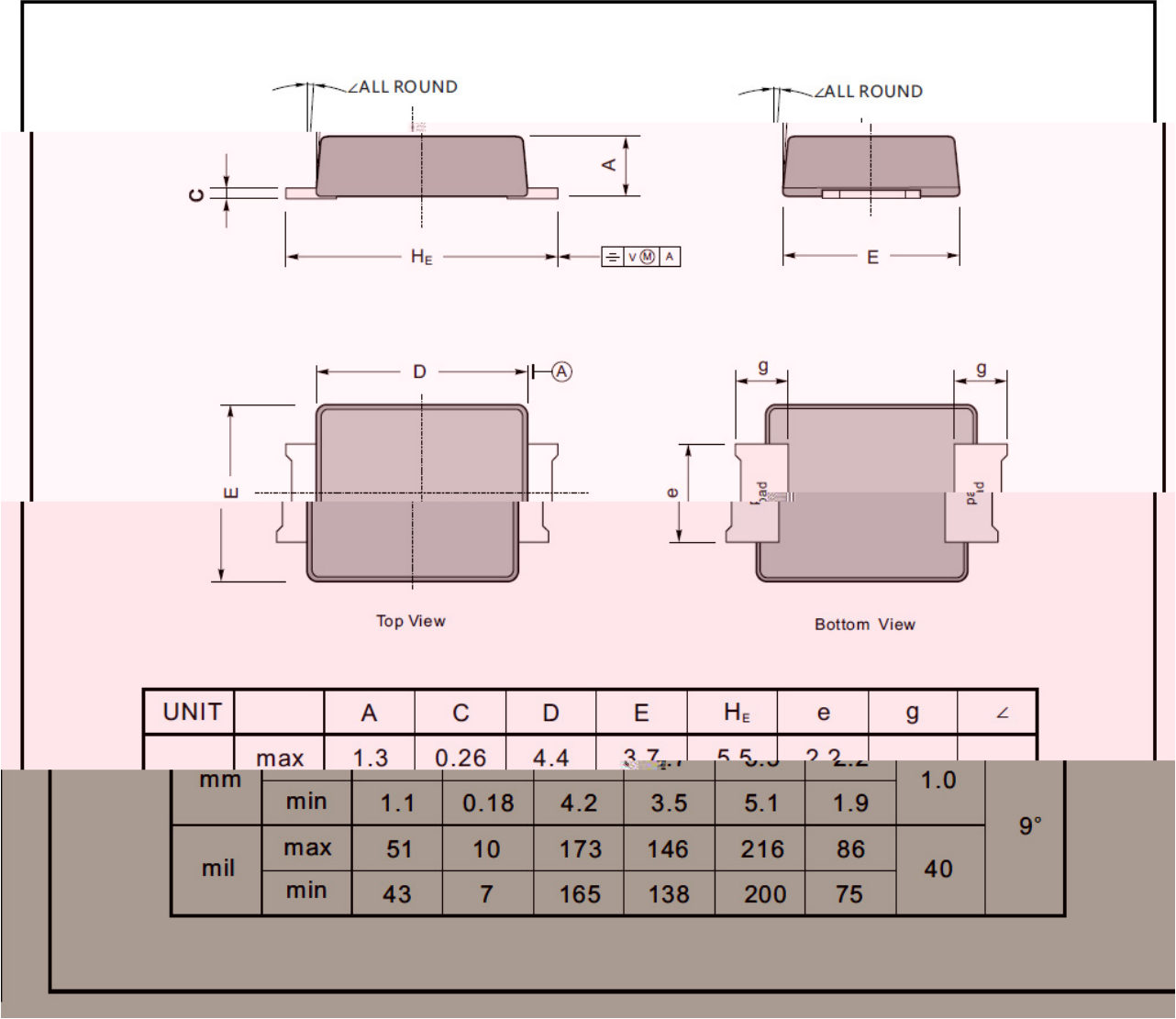
Parameter	Symbol	Test Conditions	Rating	Unit
Maximum Forward Voltage	V_F	$I_F=3.0A$	1.1	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	$T_a=25$	5.0	μA
		$T_a=125$	150	μA

/ Electrical Characteristic Curve



/ Package Dimensions

SMBF



S3ABF~S3MBF

Rev.D May.-2019



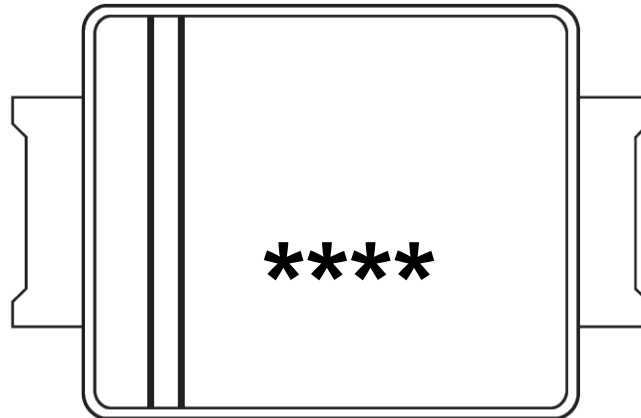
DATA SHEET

/ Marking Instructions

Marking Instructions

Marking code	Type number
S3AB	S3ABF
S3BB	S3BBF
S3DB	S3DBF
S3GB	S3GBF
S3JB	S3JBF
S3KB	S3KBF
S3MB	S3MBF

/ Marking Instructions



S3AB

1 *

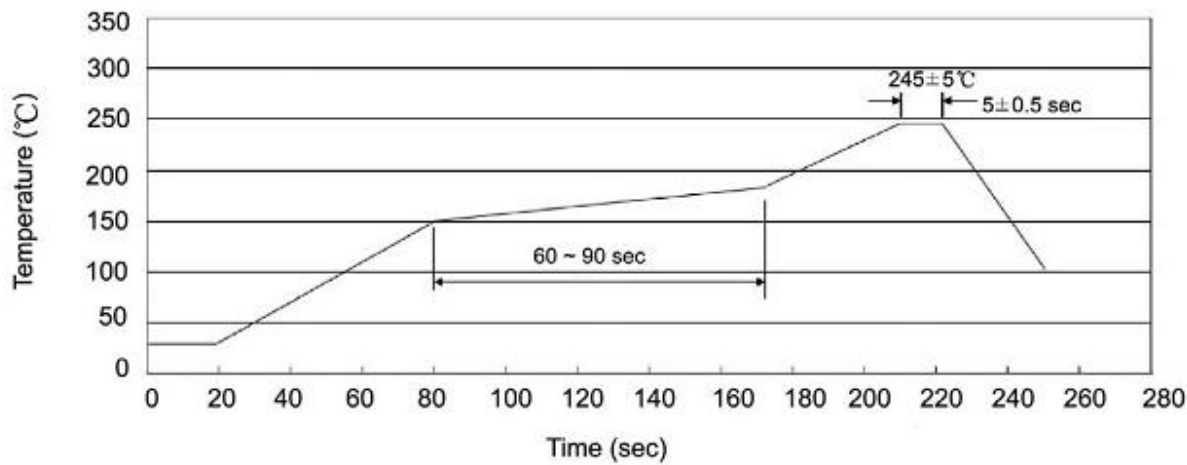
3 *

Note:

S3AB 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 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
SMBF	5000	2	10000	5	50000	13 ×15	336X332X40	380X335X366

/ Notices