

/ Descriptions

50V~600V 2.0A SMBF

Surface Mount Superfast Recovery Rectifier, Reverse Voltage: 50 to 600V, Forward Current: 2.0A, SMBF thin package.

/ Features

RoHS 2011/65/EU

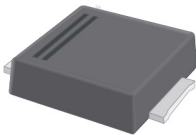
Glass Passivated Chip Junction, Fast reverse recovery time, Lead free in comply with EU RoHS 2011/65/EU directives, For surface mounted applications, Halogen free product.

/ Applications

General purpose.

/ Equivalent Circuit**/ Pinning**

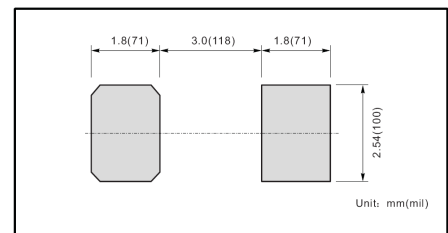
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2

PIN	DESCRIPTION
1	Cathode
2	Anode

The recommended mounting pad size

**/ Marking**

See Marking Instructions.

/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating							Unit
		ES2ABF	ES2BBF	ES2CBF	ES2DBF	ES2EBF	ES2GBF	ES2JBF	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	150	200	300	400	600	V
Maximum RMS voltage	V_{RMS}	35	70	105	140	210	280	420	V
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	300	400	600	V
Maximum Average Forward Rectified Current at $T_L = 100^\circ\text{C}$	$I_F (AV)$	2.0							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	50							A
Typical Junction Capacitance at $V_R = 4V$, $f = 1\text{MHz}$	C_j	45							pF
Typical Thermal Resistance ¹⁾	$R_{\theta JA}$	65							$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{stg}	$-55 \sim +150$							$^\circ\text{C}$

Note:

1 P.C.B. mounted with 0.5 X 0.5" (12.7 X 12.7 mm) copper pad areas.

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	数值 Rating							Unit
			ES2ABF	ES2BBF	ES2CBF	ES2DBF	ES2EBF	ES2GBF	ES2JBF	
Maximum Forward Voltage	V _F	I _F =2.0A	1.0				1.25		1.65	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	T _a =25℃	5.0							μA
		T _a =125℃	100							μA
Maximum Reverse Recovery Time	t _{rr}	I _F =0.5A I _R =1.0A I _{rr} =0.25A	35							ns

Ō ? d • Ž ¢ / Electrical Characteristic Curve

Ø □ =) ¢ / Package Dimensions

, M y f / Marking Instructions

šWD t... •Žč (x/) / :KSVKXGZ[XK 6XULORK LUX /8 8KLRU] 9URJKXOTM 6

^ač y

10• Ä ½ “ † 150 ½180 - k ž • 60 ½90sec;

20• Q > “ † 245 r5 - k ž • 4 Ò 5 r0.5sec;

30•D N ò i Ò 0 , † 2 ½10 - /sec.

Note:

1.Preheating:150~180 - , Time:60~90sec.

2.Peak Temp.:245 r5 - , Duration:5 r0.5sec.

3. Cooling Speed: 2~10 - /sec.

ÂD /Cã p ¯ »] / Resistance to Soldering Heat Test Conditions

“ † y 260 r5 -

ž • y 10 r1 sec.

Temp.:260 r5 -

Time:10 r1 sec

G P á / Packaging SPEC.

2 & x / REEL

Package Type ß m ù ´	Units g m ô h					Dimension g m d Ê (unit ! mm ³)		
	Units/Reel / í	Reels/Inner Box í / ç	Units/Inner Box / ç	Inner Boxes/Outer Box ç / ±	Units/Outer Box / ±	Reel	Inner Boxç	Outer Box±
SMBF	5000	2	10000	5	50000	13 s ×15	336X332X40	380X335X366

„Đ y f / Notices