

/ Descriptions

Surface Mount Superfast Recovery Rectifier,Reverse Voltage:50 to600V,Forward Current:2.0A, SMBF thin package.

/ Features

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

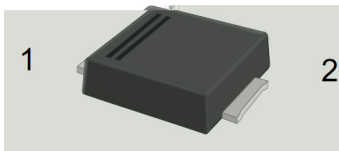
/ Applications

General purpose.

/ Equivalent Circuit

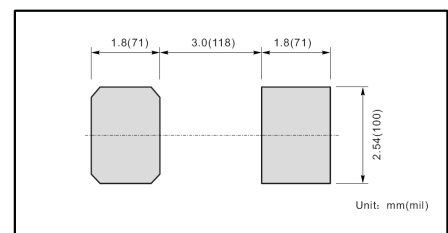


/ Pinning



PIN	DESCRIPTION
1	Cathode
2	Anode

The recommended mounting pad size



/ Marking

See Marking Instructions.

/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating							Unit
		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_{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

/ 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•Ä½“† 150½180 - kž• 60½90sec;

20•Q>“† 245 r5 - kž•4 Ò 5 r0.5sec;

30•D Nò i Ò 0,† 2½10 - /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