

Rev.F May.-2019

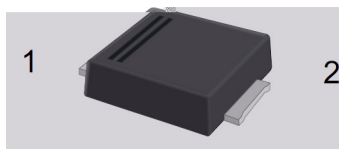
50V~600V 2.0A SMBF

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

RoHS 2011/65/EU

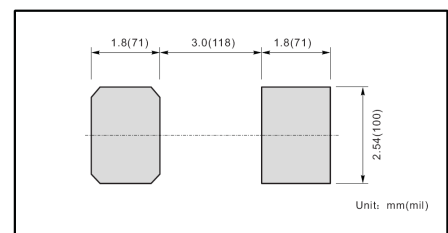
Glass Passivated Chip Junction,Fast reverse recovery time,Lead free in comply with EU R0HS 2011/65/EU directives,For surface mounted applications,Halogen free product.

General purpose.



PIN	DESCRIPTION
1	Cathode
2	Anode

The recommended mounting pad size



See Marking Instructions.

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 $T_L = 100^{\circ}C$	$I_F (AV)$	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 $V_R = 4V$, $f = 1MHz$	C_j	45							pF
Typical Thermal Resistance ¹⁾	$R_{\theta JA}$	65							$^{\circ}C/W$
Operating and Storage Temperature Range	T_j, T_{stg}	-55~+150							$^{\circ}C$

Note:

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

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





/ Marking Instructions

() / Temperature Profile for IR Reflow Soldering(Pb-Free)

Figure 1

1. Preheating: 150~180℃, Time: 60~90sec;
2. Peak Temp.: 245℃ ± 5℃, Duration: 5~10sec;
3. Cooling Speed: 2~10℃/sec.

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/ Resistance to Soldering Heat Test Conditions

Temp.: 260℃ ± 5℃, Time: 10~15 sec.

/ Packaging SPEC.

2. REEL

Package Type ES2ABF~ES2JBF	Units (mm)					Dimension (mm)		
	Units/Reel 1/1	Reels/Inner Box 1/1	Units/Inner Box 1/1	Inner Boxes/Outer Box 1/1	Units/Outer Box 1/1	Reel	Inner Box	Outer Box
SMBF	5000	2	10000	5	50000	13" × 15"	336X332X40	380X335X366

/ Notices