

/ Descriptions

50V~600V

5.0A SMBF

Surface Mount Ultrafast Recovery Rectifier, Reverse Voltage: 50 to 600V, Forward Current: 5.0A, SMBF package.

/ Features

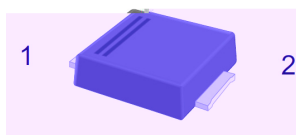
RoHS

2011/65/EU

Glass Passivated Chip Junction High efficiency Lead free in comply with EU R HS 2011/65/EU directives For surface mounted applications. Halogen free product.

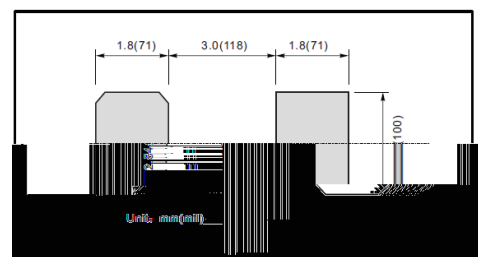
/ Applications

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
		ES5ABF	ES5BBF	ES5CBF	ES5DBF	ES5EBF	ES5GBF	ES5JBF	
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 Tc = 115	I _{F AV}	5.0							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I _{FSM}	150							A
Typical Thermal Resistance ⁽¹⁾	R _{θJA}	40							°C/W
	R _{θJC}	12							
Operating and Storage Temperature Range	T _j , T _{stg}	-55~+150							°C

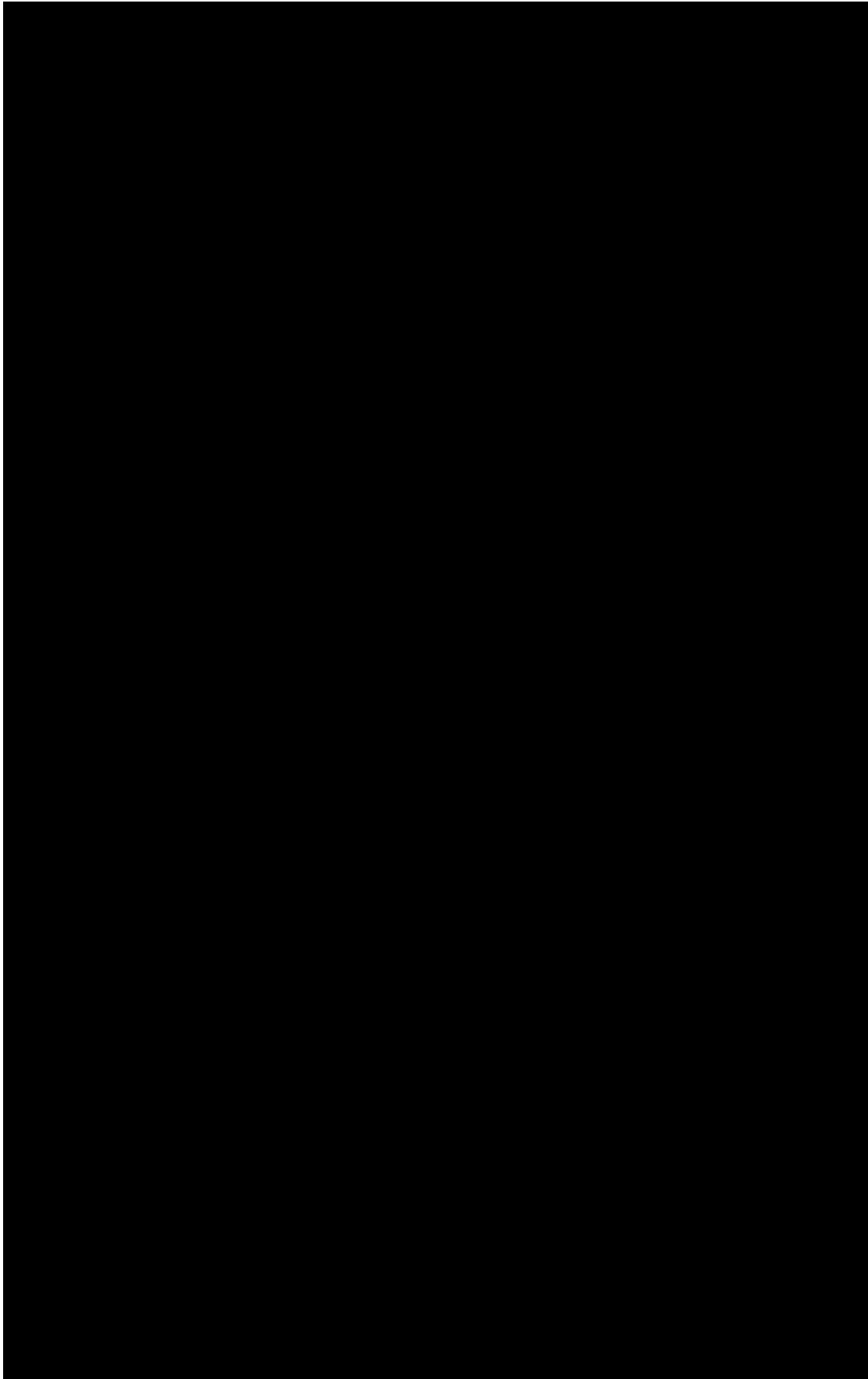
Note:

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

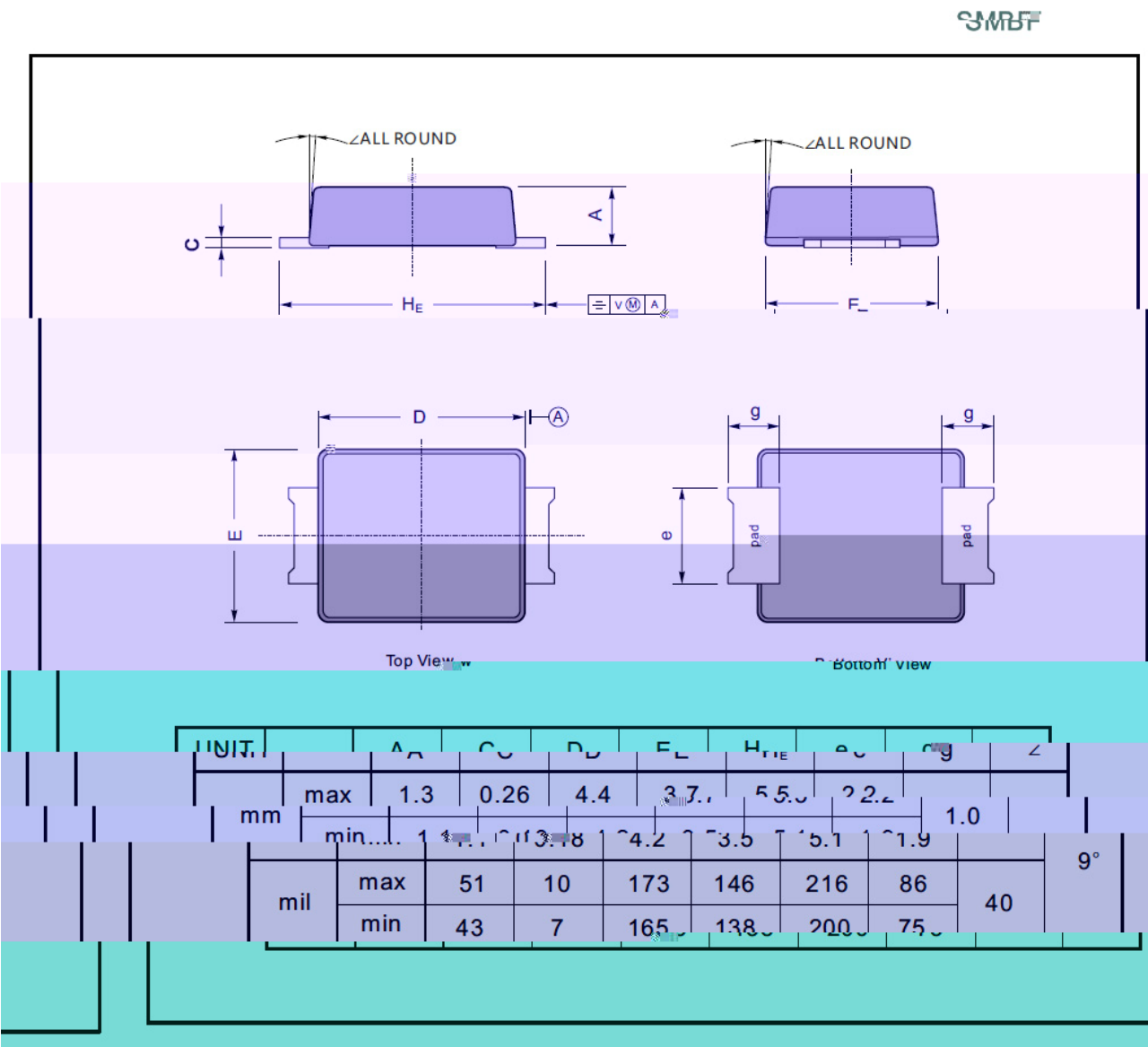
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test condition	Rating							Unit
			ES5ABF	ES5BBF	ES5CBF	ES5DBF	ES5EBF	ES5GBF	ES5JBF	
Maximum Instantaneous Forward Voltage	V _F	I _F =5.0A	1.0				1.25		1.7	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	T _a =25	10.0							uA
		T _a =125	100							
Maximum Reverse Recovery Time	T _{rr}	I _F =0.5A I _R =1.0A I _{rr} =0.25A	35							ns

/ Electrical Characteristic Curve



/ Package Dimensions





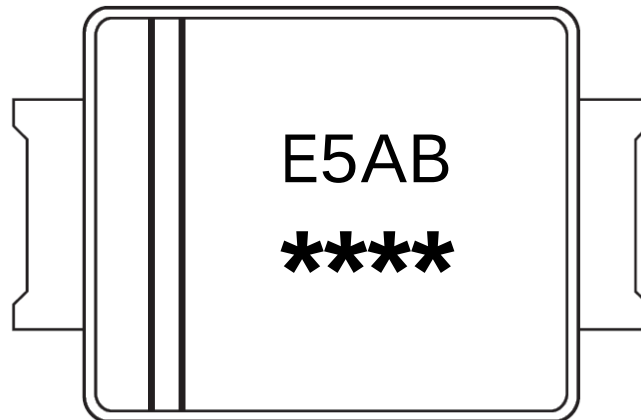
/ Marking Instructions

Marking

Type number	Marking code
ES5ABF	E5AB
ES5BBF	E5BB
ES5CBF	E5CB



/ Marking Instructions



E5AB

1 *

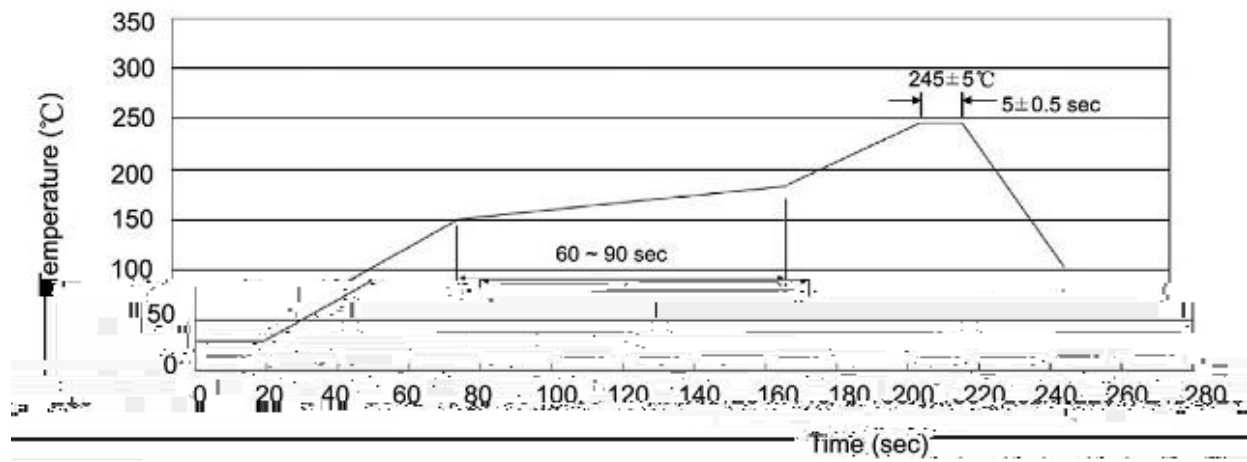
3 *

Note:

E5AB 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;
- 2 245±5 5±0.5sec;
- 3 2 10 /sec.

- 1.Preheating:150~180 , Time:60~90sec.
- 2.Peak Temp.:245±5 , Duration:5±0.5sec.
3. Cooling Speed: 2~10 /sec.