## / Descriptions

50V~600V 2.0A SMBF

Surface Mount Superfast Recovery Rectifier,Reverse Voltage:50 to600V,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 R0HS 2011/65/EU directives,For surface mounted applications,Halogen free product.

## / Applications

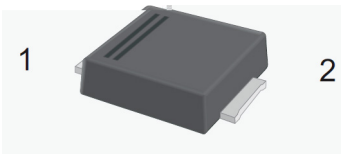
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General purpose.

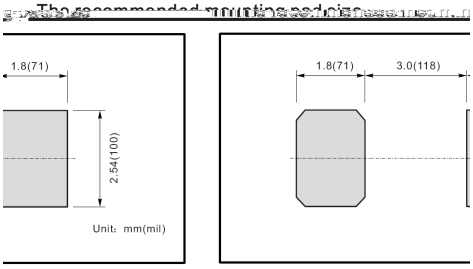
## / Equivalent Circuit



## / Pinning




| PIN | DESCRIPTION |
|---|---|
| 1 | Cathode |
| 2 | Anode |




## / Marking

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 | $I_{F\ AV}$ | 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 | | | | | | | /W |
| Operating and Storage Temperature Range | $T_j$,$T_{stg}$ | -55~+150 | | | | | | | |

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 | 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<br>$I_R$=1.0A<br>$I_{rr}$ | | | | | | | | |

## / Electrical Characteristic Curve

## , M y ƒ / Marking Instructions

š WD t ... • Ž ¢ ( x / ) / : K S V K X G Z [ X K 6 X U L O R K L U X / 8 8 K L R U ] 9 U R J K X O T M 6

| ª ¢ y | | | Note: |
|---|---|---|---|
| 1o• Ä ½ “ † | 150 ½180 - k ž • | 60 ½90sec; | 1.Preheating:150~180 - , Time:60~90sec. |
| 2o• Q › “ † | 245 r5 - k ž • 4 Ò | 5 r | |