

### ULTRA LOW VF SCHOTTKY BARRIER RECTIFIER

CURRENT

VOLTAGE 100 Volt

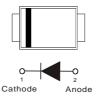
## 8 Ampere SME

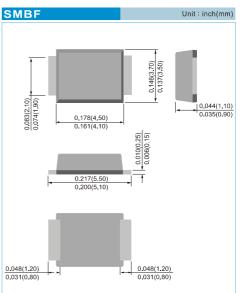
#### FEATURES

- Ideal for automated placement
- Ultra low forward voltage drop, low power loss
- High efficiency operation
- Low thermal resistance
- Ultra thin profile package for space constrained utilization
- Easy pick and place package suitable for automated handling
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

#### **MECHANICAL DATA**

- · Case: plastic molded
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0018 ounces, 0.05 grams
- Polarity: Color band denotes cathode end
- Marking: Part number





#### MAXIMUM RATINGS (TA=25°C unless otherwise noted)

| PARAMETER  |                        | SYMBOL       | VALUE        | UNIT |
|--|------------------------|--------------|--------------|------|
| Maximum Recurrent Peak Reverse Voltage   |                        | Vrrm         | 100          | V    |
| Maximum RMS Voltage  |                        | Vrms         | 70           | V    |
| Maximum DC Blocking Voltage  |                        | Vr           | 100          | V    |
| Maximum Average Rectified Output Current   |                        | I F(AV)      | 8            | А    |
| Peak Forward Surge Current : 8.3ms single half sine-wave<br>superimposed on rated load |                        | I FSM        | 80           | A    |
| Typical Junction Capacitance (VR=4V, f=1MHz)   |                        | CJ           | 360          | pF   |
| Typical Thermal Resistance   | (Notes 1)<br>(Notes 2) | Røjl<br>Røja | 15<br>135    | °C/W |
| Operating Junction Temperature and Storage Temperature range                           |                        | Тյ,Тѕтс      | -55 to + 150 | °C   |

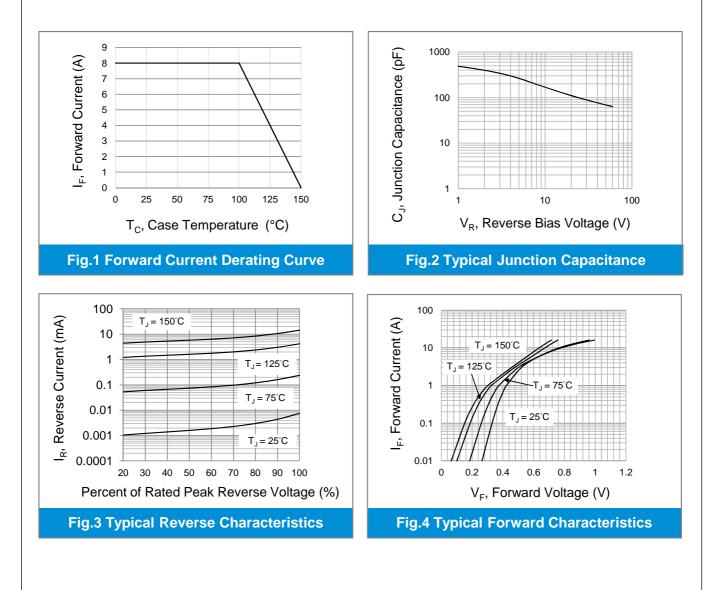
NOTES : 1.Mounted on a 10cm\*10cm\*0.5mm copper pad area

2.Mounted on a FR4 PCB, single-sided copper, mini pad.



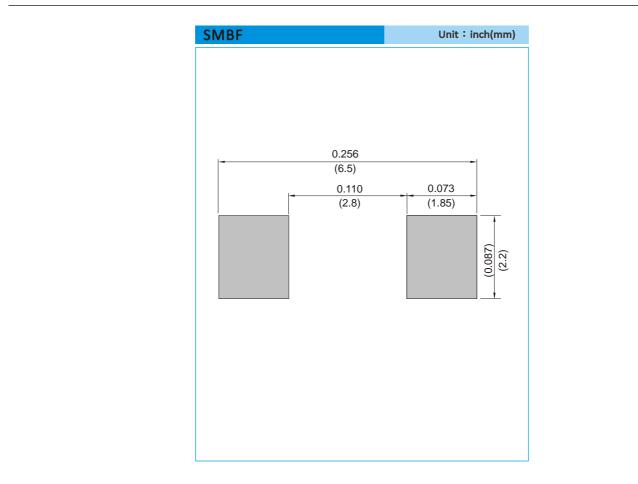
### ELECTRICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

| PARAMETER                     | SYMBOL | TEST CONDITIONS            |                     | MIN.   | TYP.                 | MAX.           | UNIT     |
|-------------------------------|--------|----------------------------|---------------------|--------|----------------------|----------------|----------|
| Break down voltage            | Vbr    | I R=0.5mA                  | TA=25°C             | 100    | -                    | -              | V        |
| Instantaneous forward voltage | VF     | I F=1A<br>I F=5A<br>I F=8A | Ta=25°C             | -<br>- | 0.42<br>0.61<br>0.71 | -<br>-<br>0.79 | V        |
|                               |        | I f=1A<br>I f=5A           | Ta=125°C            | -      | 0.33<br>0.56         | -              | V        |
| Reverse current               | l r    | VR=70V                     | TA=25°C             | -      | 5                    | -              | μΑ       |
|                               |        | VR=100V                    | Ta=25°C<br>Ta=125°C | -      | -<br>5               | 50<br>-        | μA<br>mA |





### MOUNTING PAD LAYOUT



#### ORDER INFORMATION

Packing information

T/R - 5K per 13" plastic Reel





### Part No\_packing code\_Version

SRT8100LF\_R2\_00001

### For example :

RB500V-40\_R2\_00001



Serial number

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Version code means HF

- Packing size code means 13"
- Packing type means T/R

| Packing Code XX                         |                      |                                     | Version Code XXXXX   |            |                      |                                       |
|---|----------------------|-------------------------------------|----------------------|------------|----------------------|---------------------------------------|
| Packing type                            | 1 <sup>st</sup> Code | Packing size code                   | 2 <sup>nd</sup> Code | HF or RoHS | 1 <sup>st</sup> Code | 2 <sup>nd</sup> ~5 <sup>th</sup> Code |
| Tape and Ammunition Box<br>(T/B)        | Α                    | N/A                                 | 0                    | HF         | 0                    | serial number                         |
| Tape and Reel<br>(T/R)                  | R                    | 7"                                  | 1                    | RoHS       | 1                    | serial number                         |
| Bulk Packing<br>(B/P)                   | В                    | 13"                                 | 2                    |            |                      |                                       |
| Tube Packing<br>(T/P)                   | т                    | 26mm                                | X                    |            |                      |                                       |
| Tape and Reel (Right Oriented)<br>(TRR) | S                    | 52mm                                | Y                    |            |                      |                                       |
| Tape and Reel (Left Oriented)<br>(TRL)  | L                    | PANASERT T/B CATHODE UP<br>(PBCU)   | U                    |            |                      |                                       |
| FORMING                                 | F                    | PANASERT T/B CATHODE DOWN<br>(PBCD) | D                    |            |                      |                                       |





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