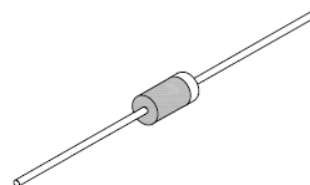


## 2.0A Super Fast Recovery Rectifier

### Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- High temperature soldering guaranteed 250°C/10 seconds  
/.0375" (9.5mm) lead length, 5lbs (2.3kg) tension
- RoHS Compliance



DO-15



### Mechanical Data

|                   |                                                                |
|-------------------|----------------------------------------------------------------|
| <b>Case:</b>      | DO-15, molded plastic                                          |
| <b>Epoxy:</b>     | UL 94V-0 rate flame retardant                                  |
| <b>Terminals:</b> | Axial leads, solderable per MIL-STD-202, Method 208 guaranteed |
| <b>Polarity:</b>  | Color band denotes cathode end                                 |
| <b>Weight:</b>    | 0.40 gram                                                      |

### Maximum Ratings and Electrical Characteristics ( $T_A=25^{\circ}\text{C}$ unless noted otherwise)

| Symbol                 | Description                               | TSF21 | TSF22 | TSF23 | TSF24 | TSF25 | TSF26 | Unit | Conditions                                                            |
|------------------------|-------------------------------------------|-------|-------|-------|-------|-------|-------|------|-----------------------------------------------------------------------|
| <b>V<sub>RRM</sub></b> | Maximum Repetitive Peak Reverse Voltage   | 50    | 100   | 150   | 200   | 300   | 400   | V    |                                                                       |
| <b>V<sub>RMS</sub></b> | Maximum RMS Voltage                       | 35    | 70    | 105   | 140   | 210   | 280   | V    |                                                                       |
| <b>V<sub>DC</sub></b>  | Maximum DC Blocking Voltage               | 50    | 100   | 150   | 200   | 300   | 400   | V    |                                                                       |
| <b>I<sub>AV</sub></b>  | Maximum Average Forward Rectified Current | 2.0   |       |       |       |       |       | A    | T <sub>a</sub> =55 °C                                                 |
| <b>I<sub>FSM</sub></b> | Peak Forward Surge Current                | 75    |       |       |       |       |       | A    | 8.3ms single half sine-wave superimposed on rated load (JEDEC method) |

## 2.0A Super Fast Recovery Rectifier

### TSF21 - TSF26

| Symbol           | Description                                             | TSF21       | TSF22 | TSF23 | TSF24 | TSF25 | TSF26 | Unit | Conditions                                                       |
|------------------|---------------------------------------------------------|-------------|-------|-------|-------|-------|-------|------|------------------------------------------------------------------|
| V <sub>F</sub>   | Maximum Instantaneous Forward Voltage                   | 0.95        |       |       |       | 1.25  |       | V    | I <sub>F</sub> =2.0 A                                            |
| I <sub>R</sub>   | Maximum DC Reverse Current at Rated DC Blocking Voltage | 5.0         |       |       |       |       |       | μA   | T <sub>A</sub> =25° C                                            |
|                  |                                                         | 100         |       |       |       |       |       |      | T <sub>A</sub> =100° C                                           |
| T <sub>rr</sub>  | Typical Reverse Recovery Time                           | 35          |       |       |       |       |       | nS   | I <sub>F</sub> =0.5A, I <sub>R</sub> =1A, I <sub>rr</sub> =0.25A |
| C <sub>J</sub>   | Typical Junction Capacitance                            | 60          |       |       |       | 30    |       | pf   | V <sub>R</sub> =4V, f=1MHz                                       |
| T <sub>J</sub>   | Operating Temperature range                             | -55 to +125 |       |       |       |       |       | ° C  |                                                                  |
| T <sub>STG</sub> | Storage Temperature Range                               | -55 to +150 |       |       |       |       |       |      |                                                                  |

### Typical Characteristics Curves

Fig.1-Max. Forward Current Derating Curve

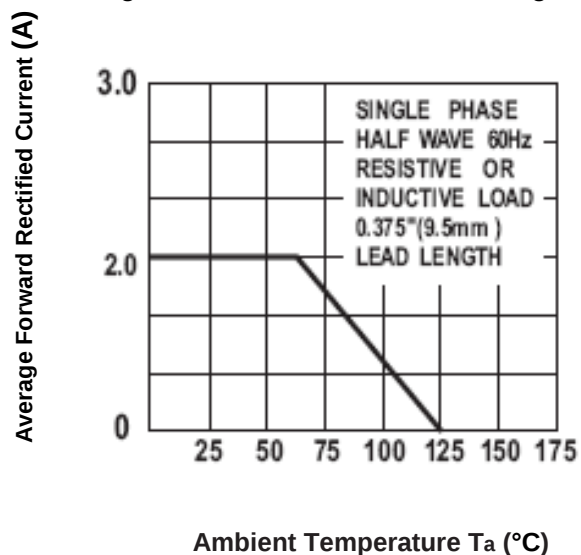
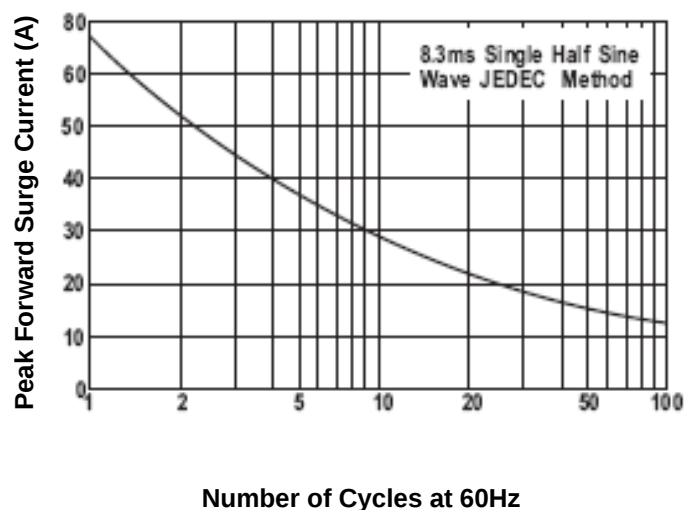


Fig.2-Max. Non-Repetitive Forward Surge Current



## 2.0A Super Fast Recovery Rectifier

### TSF21 - TSF26

Fig.3- Typical Forward Characteristics

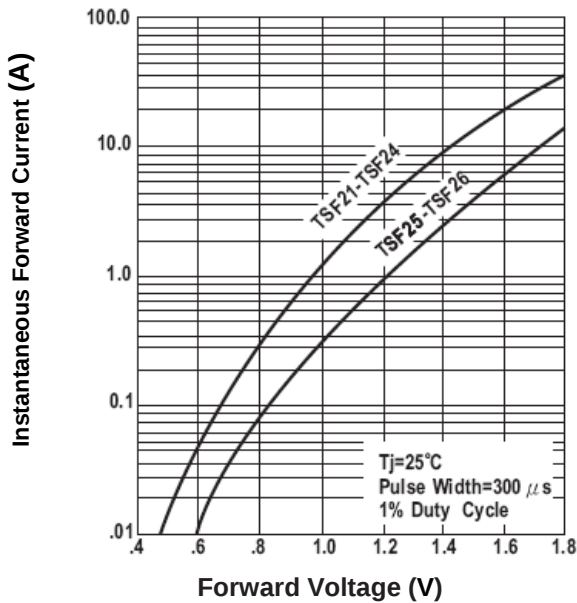


Fig.4-Typical Reverse Characteristics

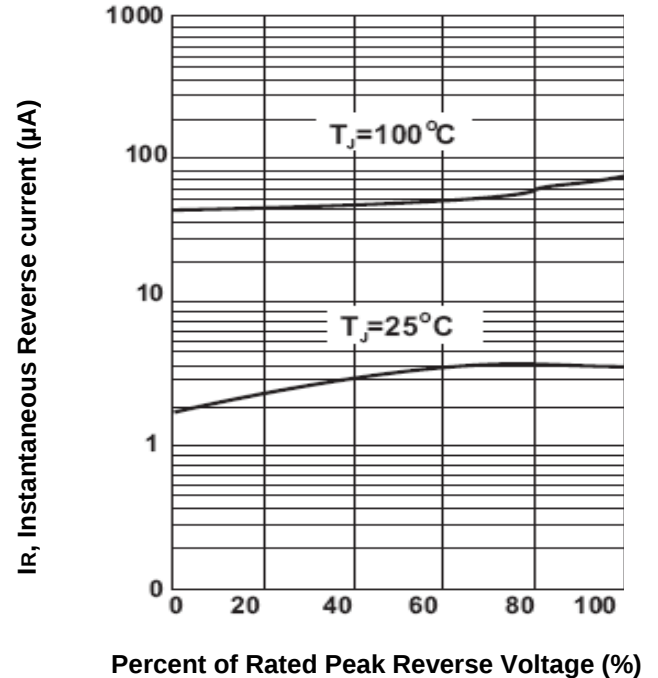
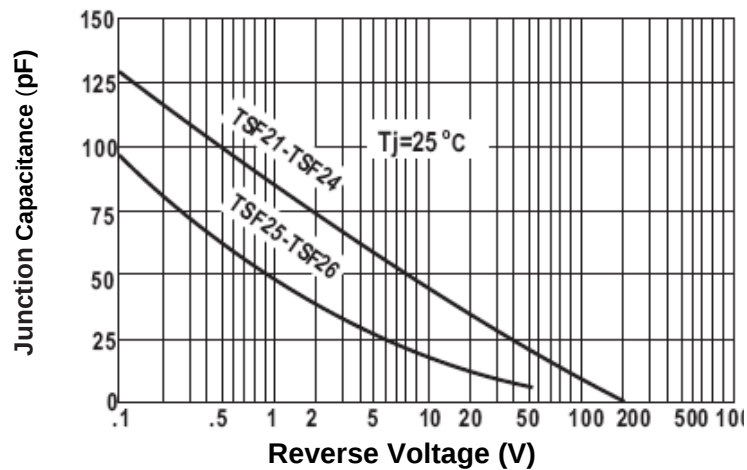


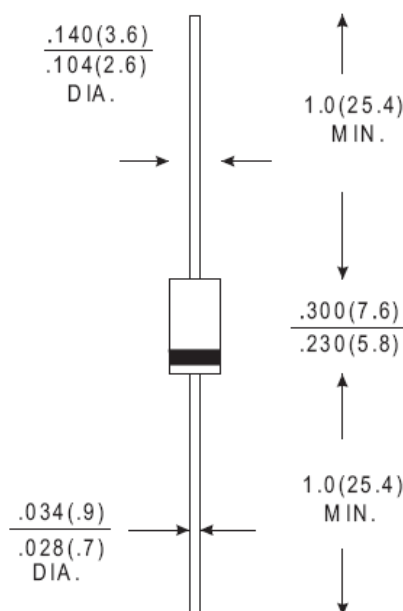
Fig.5- Typical Junction Capacitance



## 2.0A Super Fast Recovery Rectifier

TSF21 - TSF26

### Dimensions in inches (mm)



D0-15

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