



### Features

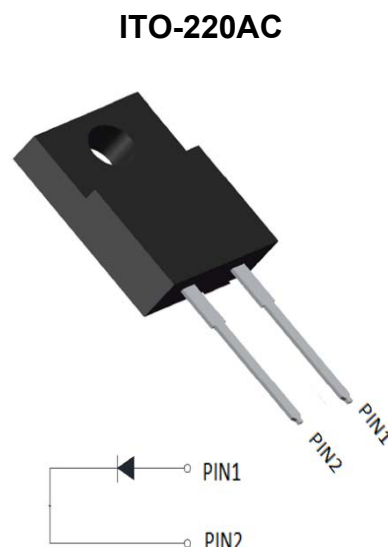
- Low profile package
- Ideal for automated placement
- Glass passivated chip junction
- High forward surge capability
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C

### Typical Applications

For use in general purpose rectification of power supplies, inverters, converters, and freewheeling diodes for consumer, and telecommunication.

### Mechanical Data

- Package: ITO-220AC
- Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, halogen-free
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102



### ■Maximum Ratings (T<sub>a</sub>=25°C Unless otherwise specified)

| PARAMETER                                                                                     | SYMBOL           | UNIT             | DSI20-2    |
|-----------------------------------------------------------------------------------------------|------------------|------------------|------------|
| Device marking code                                                                           |                  |                  | DSI20-2    |
| Maximum Repetitive peak reverse voltage                                                       | V <sub>RRM</sub> | V                | 200        |
| Maximum RMS Voltage                                                                           | V <sub>RMS</sub> | V                | 140        |
| Maximum DC Blocking Voltage                                                                   | V <sub>DC</sub>  | V                | 200        |
| Average Rectified Output Current<br>@60Hz sine wave, Resistance load, TL (FIG.1)              | I <sub>O</sub>   | A                | 20         |
| Forward Surge Current (Non-repetitive)<br>@60Hz Half-sine wave, 1 cycle, T <sub>j</sub> =25°C | I <sub>FSM</sub> | A                | 300        |
| Forward Surge Current (Non-repetitive)<br>@1ms, square wave, 1 cycle, T <sub>j</sub> =25°C    |                  |                  | 500        |
| Current squared time<br>@1ms≤t≤8.3ms T <sub>j</sub> =25°C                                     | i <sup>2</sup> t | A <sup>2</sup> s | 166        |
| Storage Temperature                                                                           | T <sub>stg</sub> | °C               | -55 ~ +175 |
| Junction Temperature                                                                          | T <sub>j</sub>   | °C               | -55 ~ +175 |

### ■Electrical Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

| PARAMETER                                               | SYMBOL         | UNIT | TEST CONDITIONS                                           | DSI20-2 |
|---------------------------------------------------------|----------------|------|-----------------------------------------------------------|---------|
| Maximum instantaneous forward voltage                   | V <sub>F</sub> | V    | I <sub>FM</sub> =20A                                      | 1.0     |
| Maximum DC reverse current at rated DC blocking voltage | I <sub>R</sub> | μA   | T <sub>j</sub> =25°C                                      | 5       |
|                                                         |                |      | T <sub>j</sub> =125°C                                     | 100     |
| Typical junction capacitance                            | C <sub>j</sub> | pF   | Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C | 55      |

### ■ Ordering Information (Example)

| PREFERRED P/N | UNIT WEIGHT(g)   | MINIMUM PACKAGE(pcs) | INNER BOX QUANTITY(pcs) | OUTER CARTON QUANTITY(pcs) | DELIVERY MODE |
|---------------|------------------|----------------------|-------------------------|----------------------------|---------------|
| DSI20-2       | Approximate 1.47 | 50                   | 1000                    | 5000                       | Tube          |

### ■ Characteristics(Typical)

FIG.1: Io-TL Curve

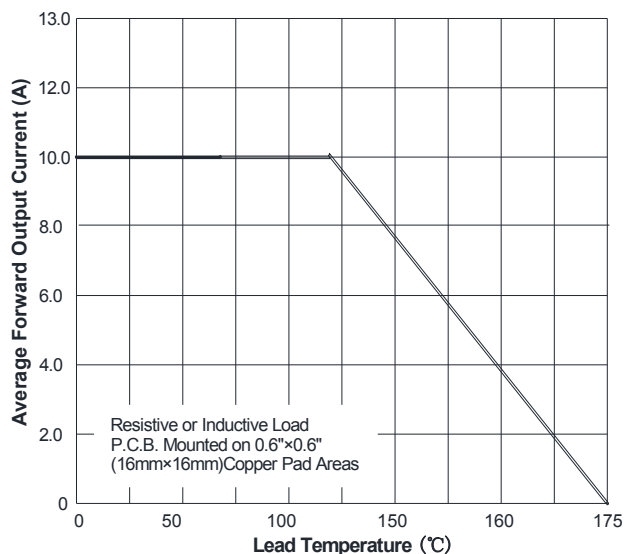


FIG.2: Forward Surge Current Capability

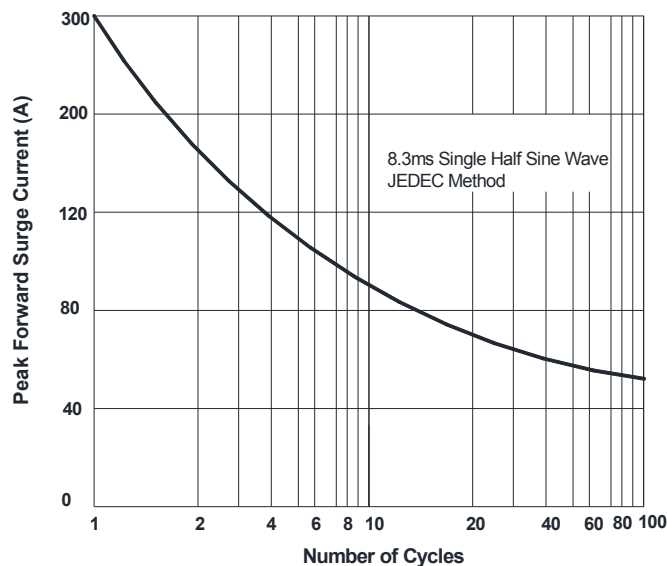


FIG.3: Typical Forward Voltage

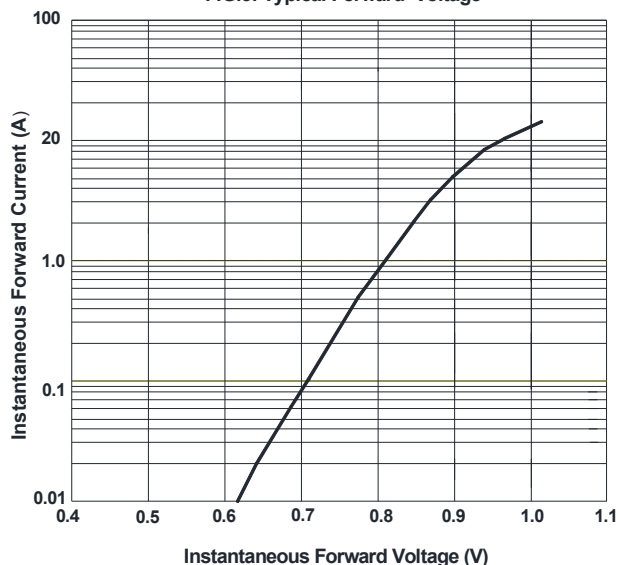
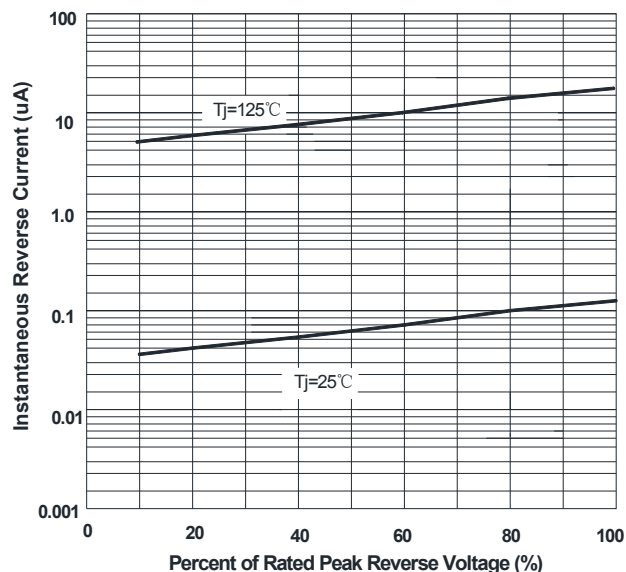


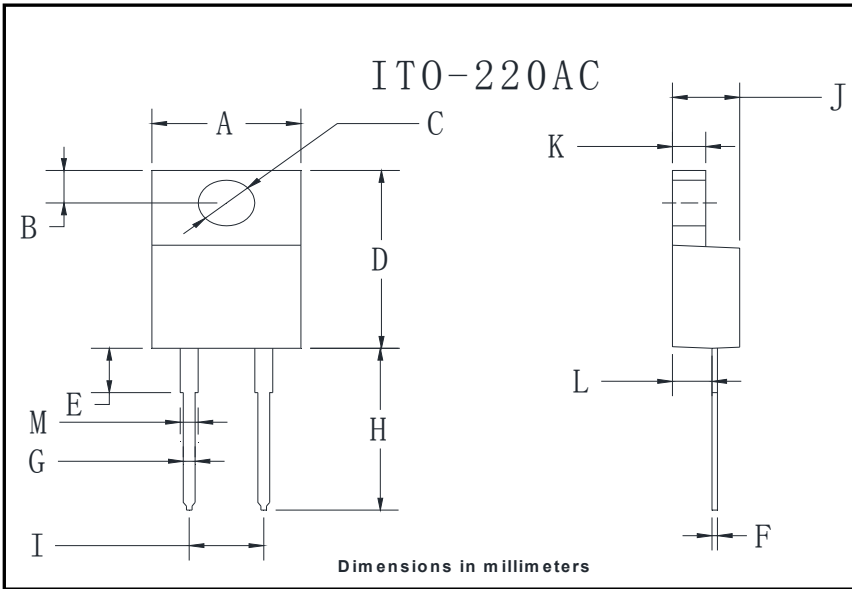
FIG.4: Typical Reverse Characteristics



# DSI20-2



## ■ Outline Dimensions



| ITO-220AC |      |      |
|-----------|------|------|
| Dim       | Min  | Max  |
| A         | 9.7  | 10.7 |
| B         | 2.15 | 3.25 |
| C         | 2.6  | 3.8  |
| D         | 14.4 | 15.9 |
| E         | 3.1  | 4.5  |
| F         | 0.4  | 0.8  |
| G         | 0.4  | 0.9  |
| H         | 12.7 | 14.2 |
| I         | 3.6  | 5.9  |
| J         | 3.9  | 5.1  |
| K         | 2.1  | 3.56 |
| L         | 2.1  | 3.2  |
| M         | 1.0  | 1.8  |

| Packge  | Packing    | Box Size<br>L×W×H(mm) | Quatity(pcs/box) | Carton Size<br>L×W×H(mm) | Quatity(pcs/carton) |
|---------|------------|-----------------------|------------------|--------------------------|---------------------|
| ITO-220 | 50pcs/Tube | 558×148×38            | 1000             | 565×225×170              | 5000                |