

**Features**

- Halogen Free. "Green" Device (Note 1)
- High Reliability
- Low Reverse Current And Low Forward Voltage.
- Small Surface Mount Type
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1

**Maximum Ratings**

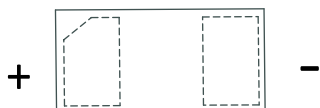
- Operating Junction Temperature Range: -55°C to +125°C
- Storage Temperature Range: -55°C to +125°C
- Thermal Resistance :1000°C/W Junction to Ambient

| Parameter  | Symbol       | Rating | Units |
|--|--------------|--------|-------|
| Repetitive Peak Reverse Voltage                                    | $V_R$        | 30     | Vdc   |
| RMS Reverse Voltage  | $V_{R(RMS)}$ | 21     | Vdc   |
| Mean Rectifying Current  | $I_O$        | 100    | mAdc  |
| Non-Repetitive Peak forward Surge Current@t=8.3ms , half sine wave | $I_{FSM}$    | 500    | mAdc  |
| Power Dissipation  | $P_d$        | 100    | mW    |

**Electrical Characteristics @ 25°C Unless Otherwise Specified**

| Parameter   | Symbol     | Min | Typ  | Max          | Units      |
|---|------------|-----|------|--------------|------------|
| Reverse Breakdown Voltage ( $I_R=50\mu A$ )           | $V_{(BR)}$ | 30  | ---  | ---          | Vdc        |
| Forward Voltage ( $I_F=10mAdc$ )<br>( $I_F=100mAdc$ ) | $V_F$      | --- | 0.49 | 0.38<br>0.53 | Vdc        |
| Reverse Current ( $V_R=10Vdc$ )<br>( $V_R=30Vdc$ )    | $I_R$      | --- | 0.8  | 7<br>50      | $\mu A$ dc |

Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.



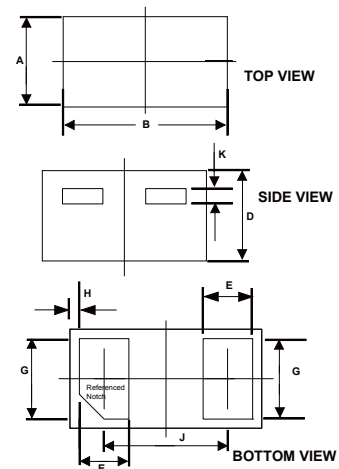
FRONTSIDE



Marking: F

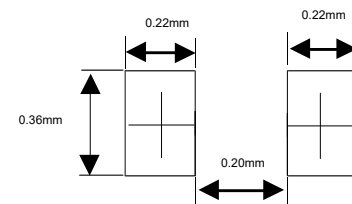
**100 mA  
Schottky Barrier Diode  
30 Volts**

0201



| DIM | DIMENSIONS |       |       |       | NOTE |
|-----|------------|-------|-------|-------|------|
|     | INCHES     |       | MM    |       |      |
|     | MIN        | MAX   | MIN   | MAX   |      |
| A   | 0.011      | 0.015 | 0.270 | 0.370 |      |
| B   | 0.022      | 0.026 | 0.570 | 0.670 |      |
| D   | 0.011      | 0.013 | 0.275 | 0.340 |      |
| E   | 0.005      | 0.008 | 0.125 | 0.195 |      |
| G   | 0.009      | 0.012 | 0.225 | 0.295 |      |
| H   | 0.001      |       | 0.030 |       | TYP. |
| J   | 0.014      | 0.017 | 0.365 | 0.435 |      |
| K   | 0.002      |       | 0.050 |       | TYP. |

**SUGGESTED SOLDER PAD LAYOUT**



**Curve Characteristics**

Fig. 1 - Forward Characteristics

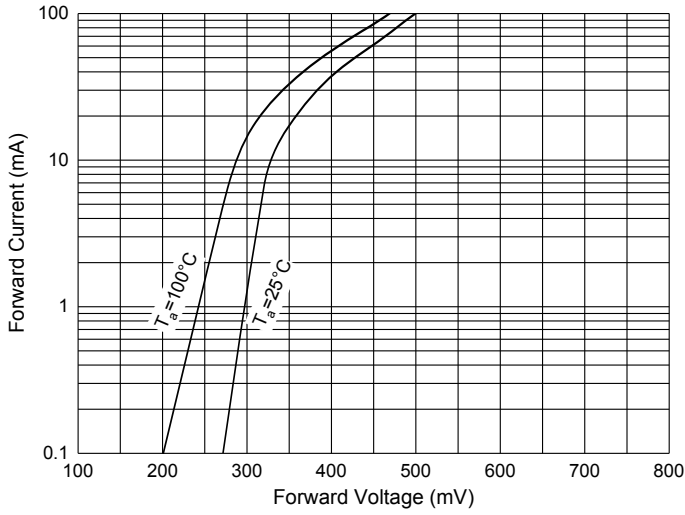


Fig. 2 - Reverse Characteristics

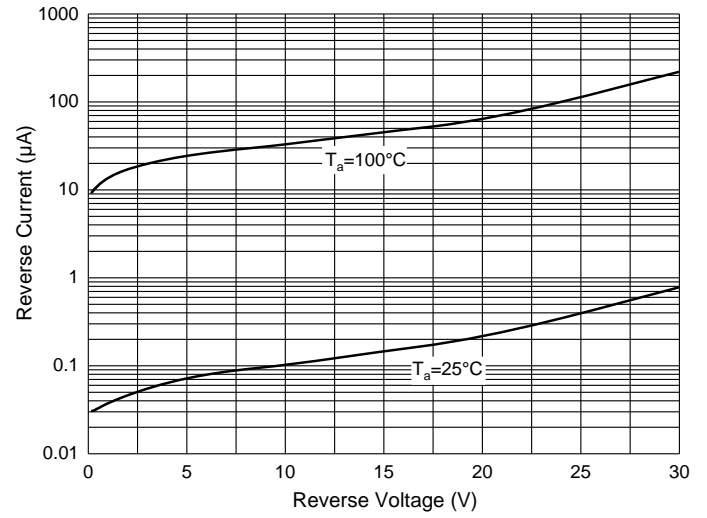


Fig. 3 - Capacitance Characteristics

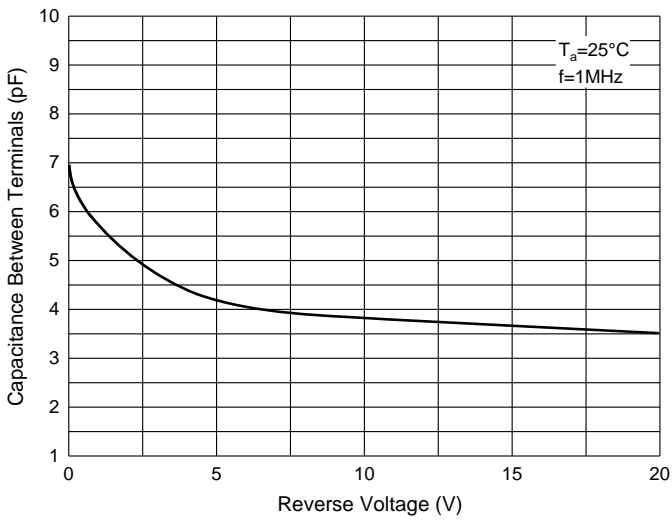
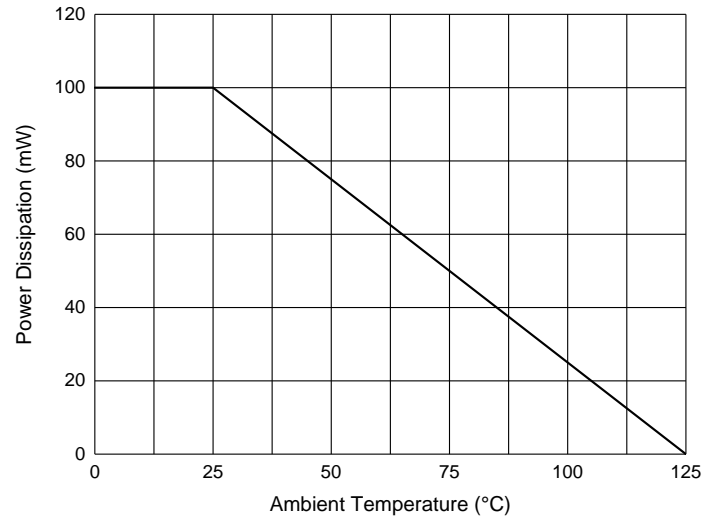


Fig. 4 - Power Derating Curve



## Ordering Information

| Device         | Packing               |
|----------------|-----------------------|
| Part Number-TP | Tape&Reel:10Kpcs/Reel |

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