## Features

- High Reliability
- High Speed (Trr=1.5ns Typ.)
- Halogen Free. “Green” Device (Note 1)
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

# 100 mA Switching Diode 80 Volts

## Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C

| MCC Part Number | Device Marking | Peak Reverse Voltage $V_{RM}$ |
|---|---|---|
| DAP202U | P | 80V |

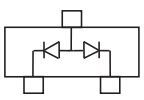
| | | | |
|---|---|---|---|
| Peak Forward Curren | $I_{FM}$ | 300mA | |
| Average Rectified Output Current | $I_o$ | 100mA | |
| Power Dissipation | $P_D$ | 200mW | |

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

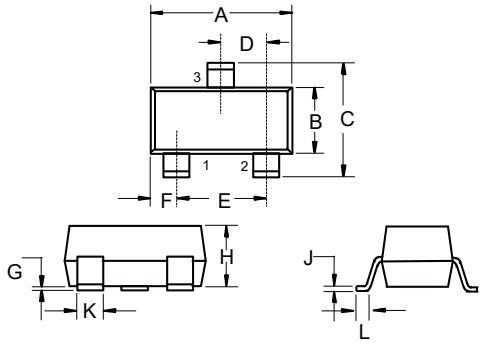
| | | | |
|---|---|---|---|
| Minimum Reverse Breakdown Voltage | $V_{BR}$ | 80V | $I_R$=100μA |
| Maximum Forward Voltage | $V_F$ | 1.2V | $I_F$=100.0mA |
| Maximum Reverse Current | $I_R$ | 0.1μA | $V_R$=70V |
| Maximum Diode Capacitance | $C_D$ | 3.5pF | $V_R$=6.0V,f=1.0MHz |
| Maximum Reverse Recovery Time | $t_{rr}$ | 4.0ns | $I_F$=5mA, $V_R$=6V |

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

### Internal Structure

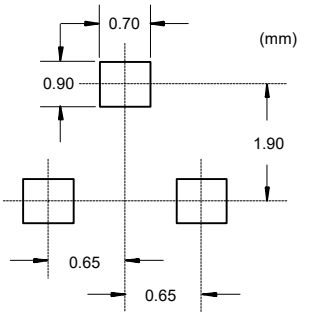


## SOT-323




| DIMENSIONS | | | | | |
|---|---|---|---|---|---|
| DIM | INCHES | | MM | | NOTE |
| | MIN | MAX | MIN | MAX | |
| A | 0.071 | 0.087 | 1.80 | 2.20 | |
| B | 0.045 | 0.053 | 1.15 | 1.35 | |
| C | 0.083 | 0.096 | 2.10 | 2.45 | |
| D | 0.026 | | 0.65 | | TYP. |
| E | 0.047 | 0.055 | 1.20 | 1.40 | |
| F | 0.012 | 0.016 | 0.30 | 0.40 | |
| G | 0.000 | 0.004 | 0.00 | 0.10 | |
| H | 0.035 | 0.044 | 0.90 | 1.10 | |
| J | 0.002 | 0.010 | 0.05 | 0.25 | |
| K | 0.006 | 0.016 | 0.15 | 0.40 | |
| L | 0.010 | 0.018 | 0.26 | 0.46 | |

**Suggested Solder Pad Layout**



## Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

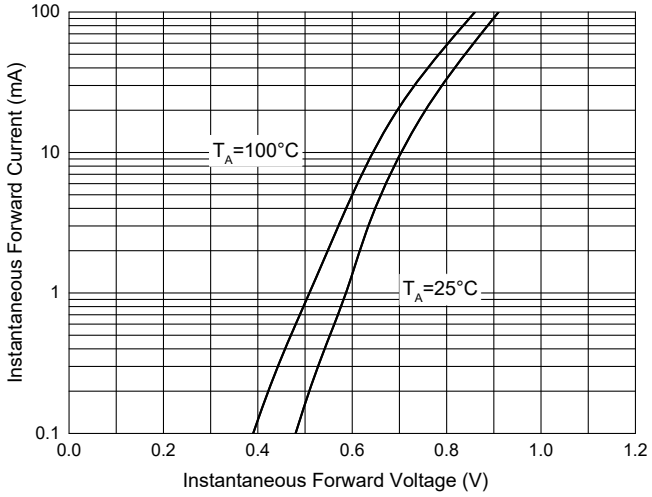



Fig. 2 - Typical Reverse Leakage Characteristics

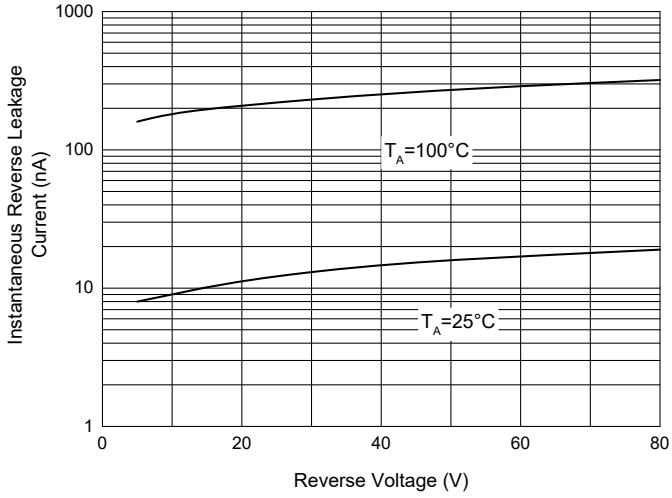
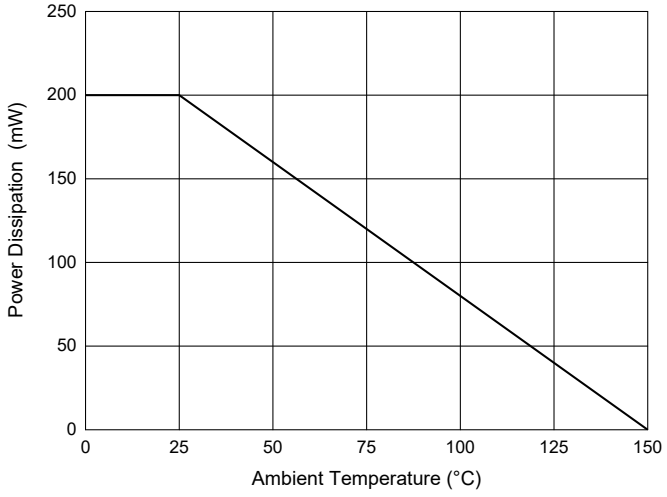



Fig. 3 - Power Derating Curve



## Ordering Information

| Device | Packing |
|---|---|
| Part Number-TP | Tape&Reel: 3Kpcs/Reel |

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