

Features

- 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
- Low Diode Capacitance
- Low Diode Forward Resistance
- Halogen Free. "Green" Device (Note 1)

Maximum Ratings

- Operating Junction Temperature Range: -65°C to +150°C
- Storage Temperature Range: -65°C to +150°C
- Thermal Resistance: 85°C/W Junction to Solder Point

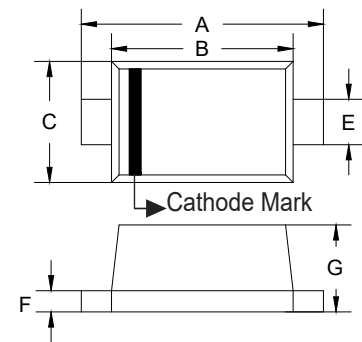
| Parameter | Symbol | Limits | Unit |
|---|--------|--------|------|
| Continuous Reverse Voltage | V_R | 60 | V |
| Forward Current | I_F | 50 | mA |
| Power Dissipation($T_A=90^\circ\text{C}$) | P_D | 715 | mW |

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

Device Marking: A5

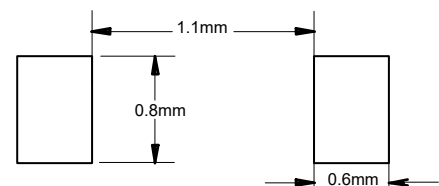
General Purpose Pin Diodes 715mW

SOD-523



| DIM | DIMENSIONS | | | | NOTE |
|-----|------------|-------|------|------|------|
| | INCHES | | MM | | |
| | MIN | MAX | MIN | MAX | |
| A | 0.059 | 0.067 | 1.50 | 1.70 | |
| B | 0.043 | 0.051 | 1.10 | 1.30 | |
| C | 0.030 | 0.033 | 0.75 | 0.85 | |
| E | 0.010 | 0.014 | 0.25 | 0.35 | |
| F | 0.003 | 0.008 | 0.08 | 0.20 | |
| G | 0.020 | 0.026 | 0.50 | 0.65 | |

SUGGESTED SOLDER PAD LAYOUT



Electrical Characteristics @ 25°C Unless Otherwise Specified

| Parameter | Symbol | Min. | Typ | Max. | Conditions |
|----------------------------|----------|------|-------|--------|------------------------|
| Continuous Reverse Voltage | V_R | 50V | | | $I_R=10\mu A$ |
| Forward Voltage | V_F | | | 1.1V | $I_F=50mA$ |
| Reverse Current | I_R | | | 100nA | $V_R=50V$ |
| Diode Capacitance | C_{d1} | | 0.4pF | | $V_R=0V, f=1MHz$ |
| | C_{d2} | | | 0.55pF | $V_R=1V, f=1MHz$ |
| | C_{d3} | | | 0.35pF | $V_R=5V, f=1MHz$ |
| Diode Forward Resistance | R_D | | | 9Ω | $I_F=0.5mA, f=100MHz;$ |
| | R_D | | | 6.5Ω | $I_F=1.0mA, f=100MHz;$ |
| | R_D | | | 2.5Ω | $I_F=10mA, f=100MHz;$ |

Curve Characteristics

Fig. 1 - Forward Characteristics

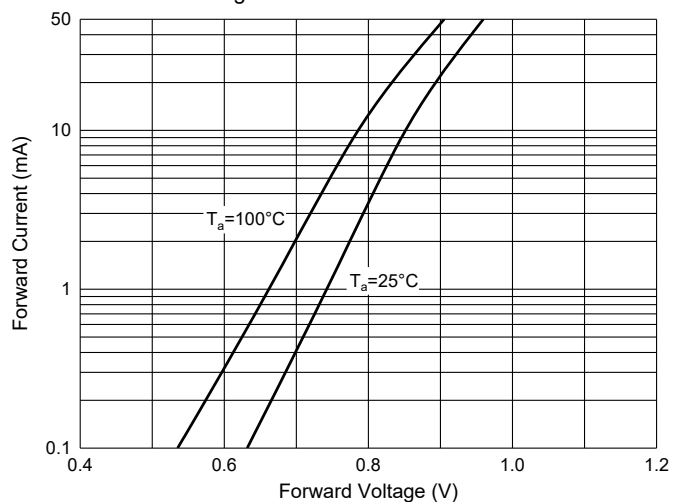


Fig. 2 - Reverse Characteristics

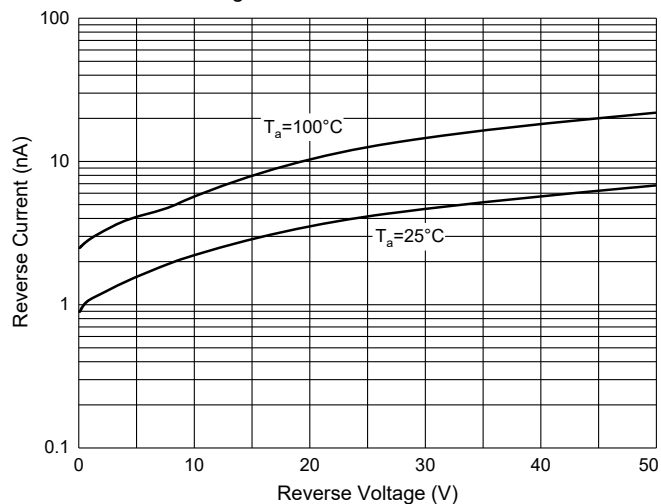
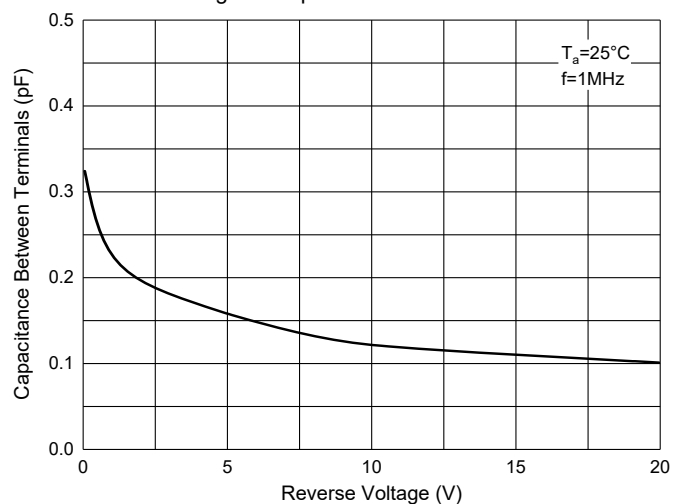


Fig. 3 - Capacitance Characteristics



Ordering Information

| Device | Packing |
|----------------|----------------------|
| Part Number-TP | Tape&Reel;8Kpcs/Reel |

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