

**Features**

- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 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)
- Halogen Free. "Green" Device (Note 1)

**Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +125°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 1000°C/W Junction to Ambient

| MCC Part Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum DC Blocking Voltage |
|-----------------|----------------|--|-----------------------------|
| RB521CS-30      | F              | 30V                                    | 30V                         |

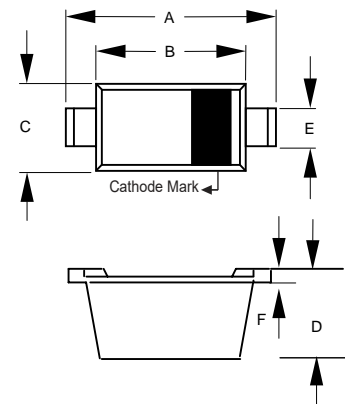
**Electrical Characteristics @ 25°C Unless Otherwise Specified**

|                            |           |  |   |
|----------------------------|-----------|--|---|
| Mean Rectifying Current    | $I_O$     | 100mA                                  |   |
| Peak Forward Surge Current | $I_{FSM}$ | 0.5A                                   | 60Hz, 1cyc                                    |
| Forward Voltage            | $V_F$     | 0.35V(Max)<br>0.40V(Max)<br>1.00V(Max) | $I_F=10mA$ ;<br>$I_F=20mA$ ;<br>$I_F=100mA$ ; |
| Reverse Current            | $I_R$     | 10 $\mu$ A(Max)<br>50 $\mu$ A(Max)     | $V_R=10V$<br>$V_R=30V$                        |
| Power Dissipation          | $P_D$     | 100mW                                  |   |

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

**100 mA  
Schottky Barrier  
Diode  
30 Volts**

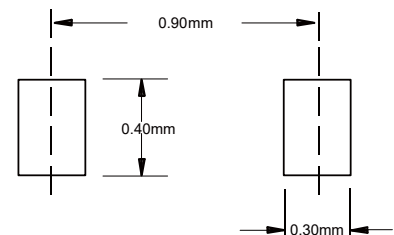
**SOD-923**



**DIMENSIONS**

| DIM | INCHES |       | MM   |      | NOTE |
|-----|--------|-------|------|------|------|
|     | MIN    | MAX   | MIN  | MAX  |      |
| A   | 0.037  | 0.041 | 0.95 | 1.05 |      |
| B   | 0.030  | 0.033 | 0.75 | 0.85 |      |
| C   | 0.022  | 0.026 | 0.55 | 0.65 |      |
| D   | 0.014  | 0.017 | 0.36 | 0.43 |      |
| E   | 0.006  | 0.010 | 0.15 | 0.25 |      |
| F   | 0.003  | 0.007 | 0.07 | 0.17 |      |

**Suggested Solder Pad Layout**



**Curve Characteristics**

Fig. 1 - Forward Characteristics

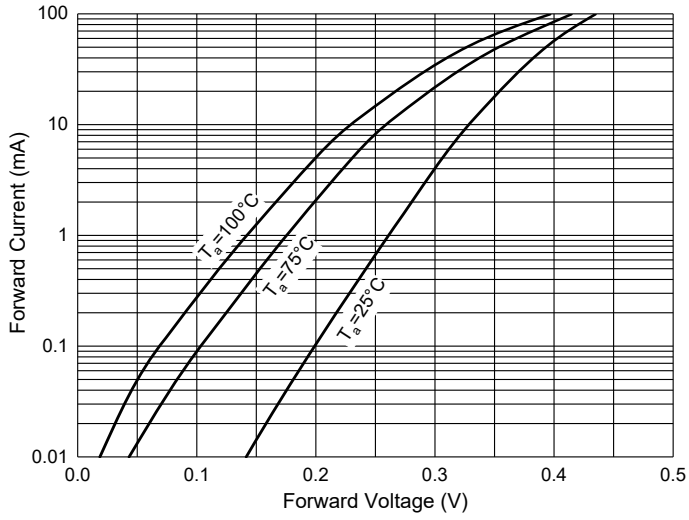


Fig. 2 - Reverse Characteristics

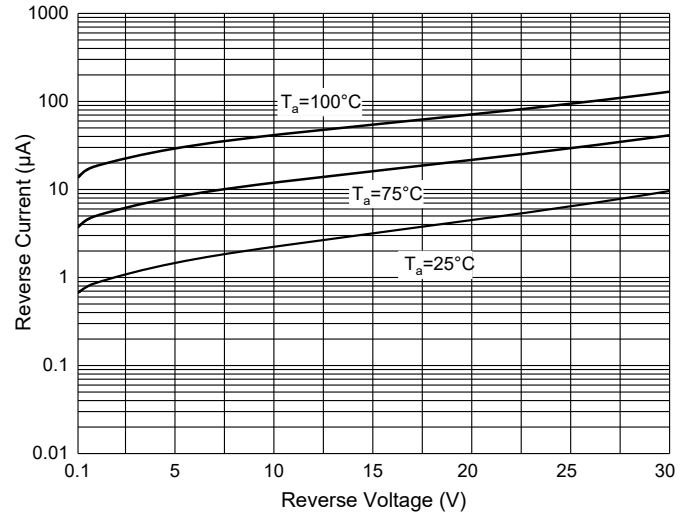


Fig. 3 - Capacitance Characteristics

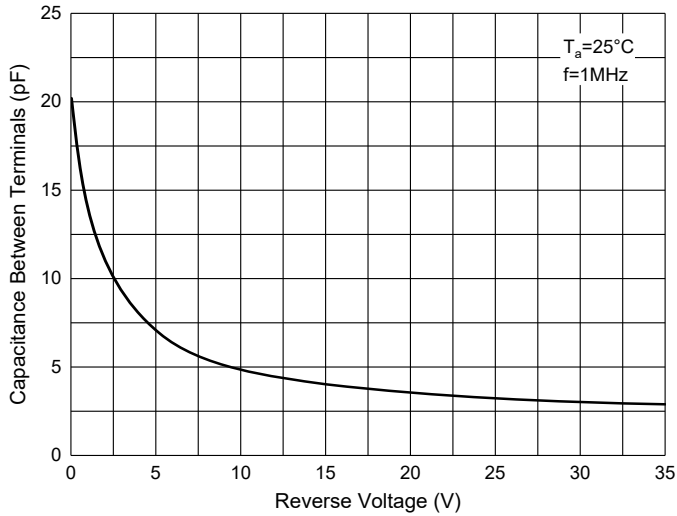
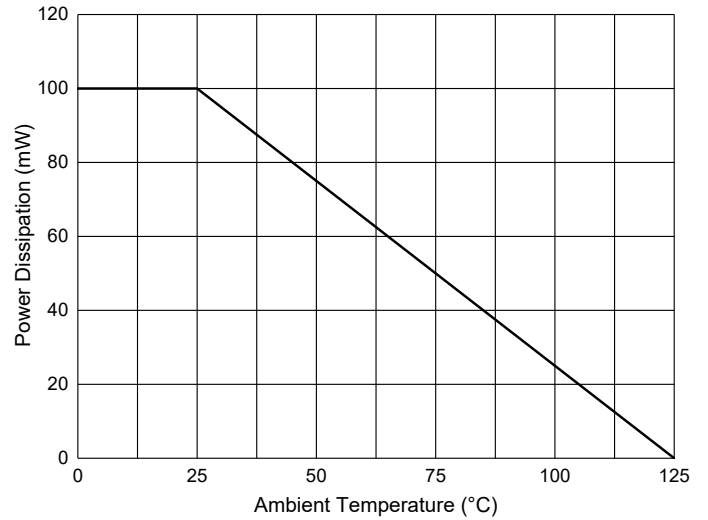


Fig. 4 - Power Derating Curve



## Ordering Information

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

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