

## 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

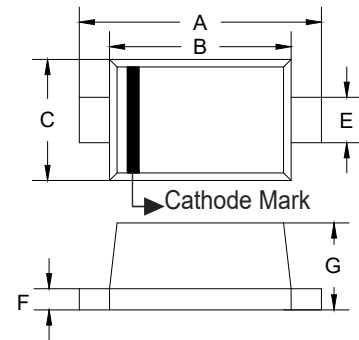
Parameter	Symbol	Limits	Unit
Continuous Reverse Voltage	$V_R$	60	V
Forward Current	$I_F$	50	mA
Power Dissipation( $T_A=90^\circ\text{C}$ )	$P_D$	715	mW

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**

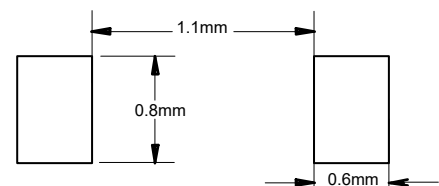
# General Purpose Pin Diodes 715mW

## 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

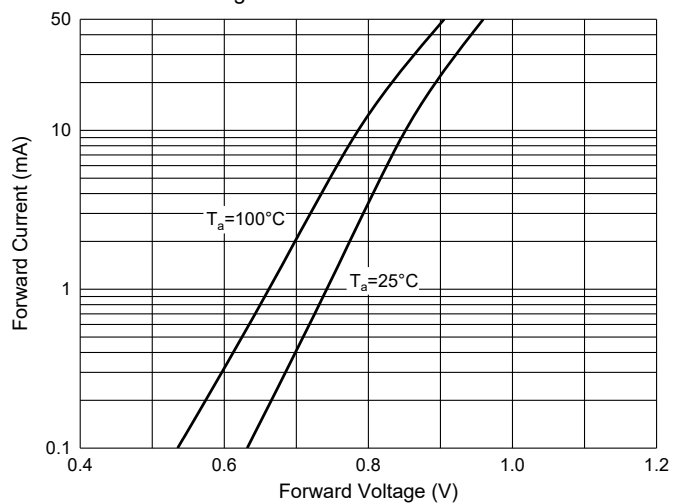


Fig. 2 - Reverse Characteristics

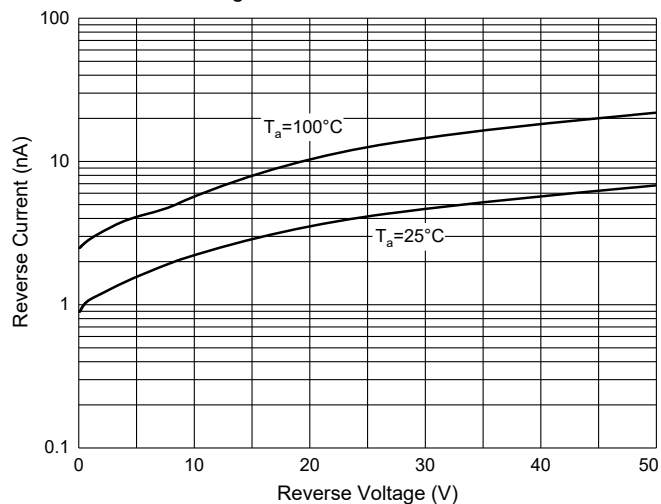
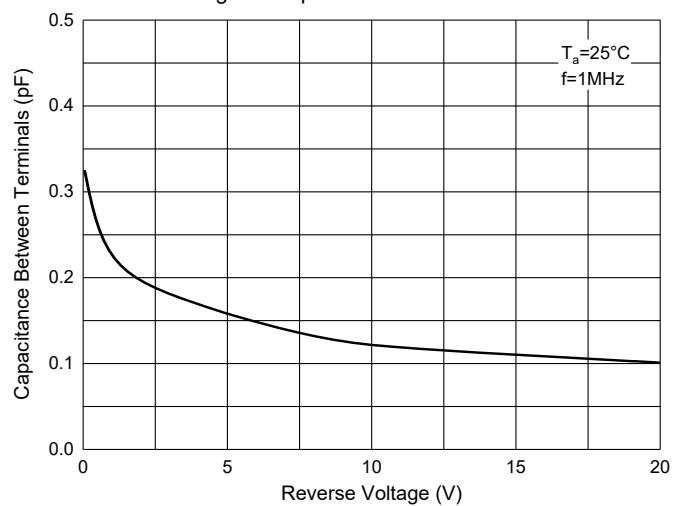


Fig. 3 - Capacitance Characteristics



## Ordering Information

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

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