



**THE DATASHEET OF
BAP50-03-TP**



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 Ambient

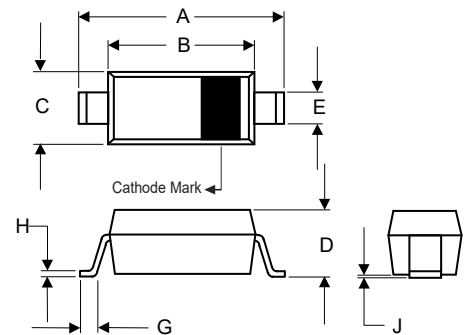
Parameter	Symbol	Limits	Unit
Continuous Reverse Voltage	V_R	50	V
Forward Current	I_F	50	mA
Power Dissipation($T_A=90^\circ\text{C}$)	P_D	200	mW

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: A81

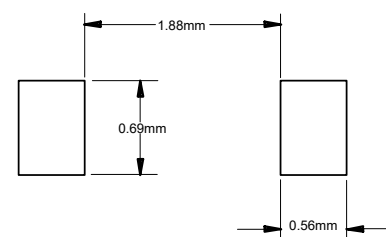
General Purpose Pin Diodes 200mW

SOD-323



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.090	0.107	2.30	2.70	
B	0.063	0.071	1.60	1.80	
C	0.045	0.053	1.15	1.35	
D	0.031	0.045	0.80	1.15	
E	0.010	0.016	0.25	0.40	
G	0.004	0.018	0.10	0.45	
H	0.004	0.010	0.10	0.25	
J	-----	0.006	-----	0.15	

SUGGESTED SOLDER PAD LAYOUT



Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Min.	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}		0.91pF	$V_R=0V, f=1MHz$
	C_{d2}		0.55pF	$V_R=1V, f=1MHz$
	C_{d3}		0.35pF	$V_R=5V, f=1MHz$
Diode Forward Resistance	R_D		40Ω	$I_F=0.5mA, f=100MHz$; Note 2
	R_D		25Ω	$I_F=1.0mA, f=100MHz$; Note 2
	R_D		5Ω	$I_F=10mA, f=100MHz$; Note 2

Note 2. Guaranteed on AQL basis: inspection level S4,AQL 1.0.

Curve Characteristics

Fig. 1 - Forward Characteristics

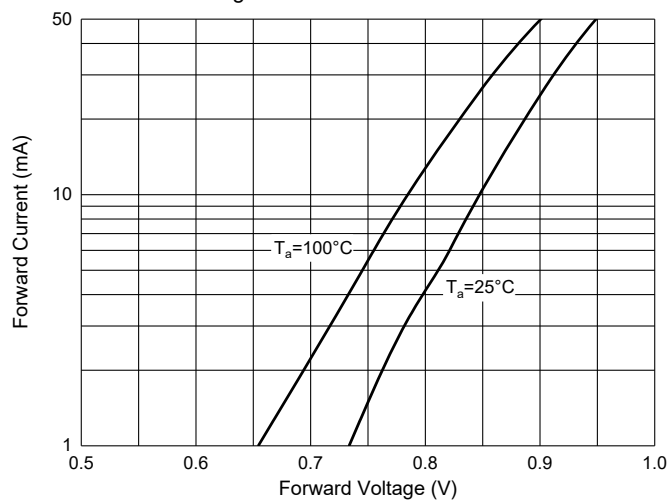


Fig. 2 - Reverse Characteristics

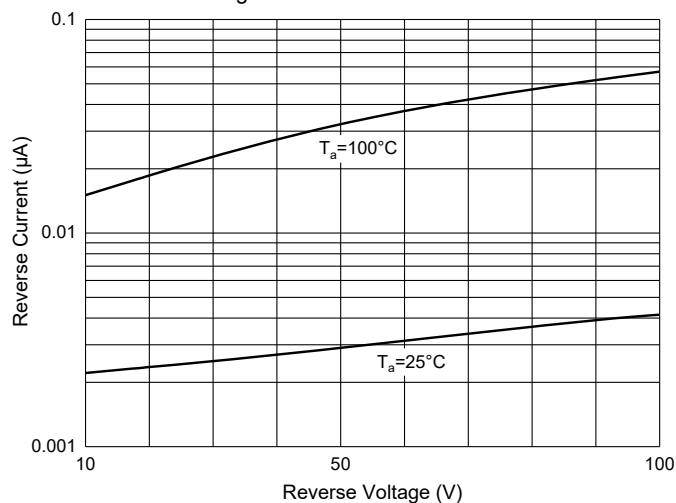


Fig. 3 - Capacitance Characteristics

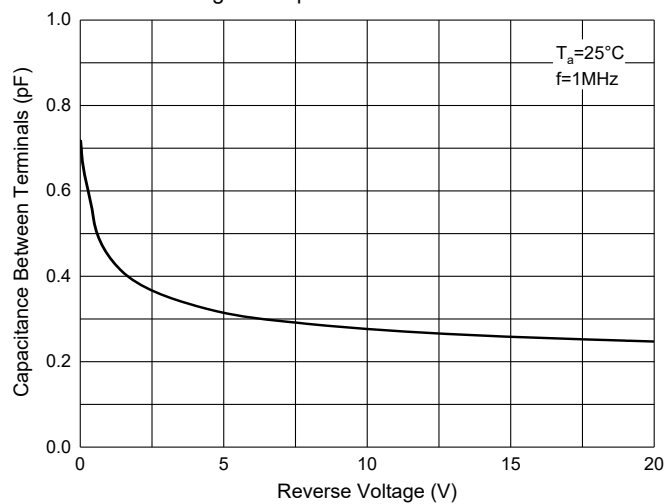
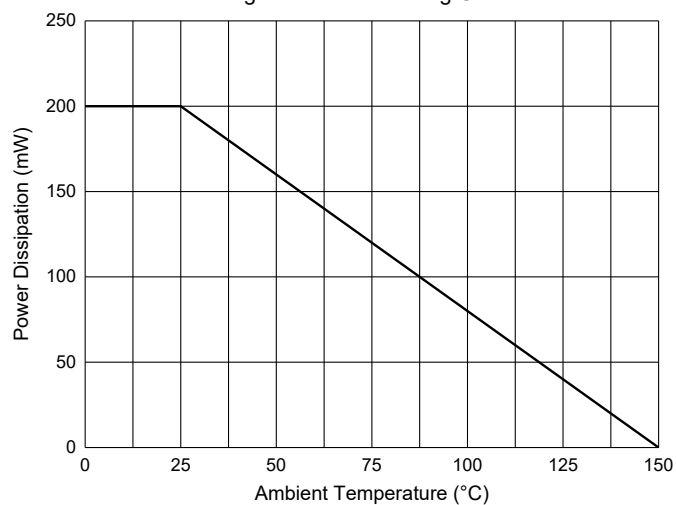


Fig. 4 - Power Derating Curve



Ordering Information

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

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