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)

General Purpose Pin Diodes 250mW

Maximum Ratings

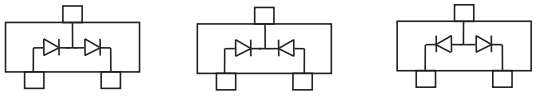
- Operating Junction Temperature Range: -65°C to +150°C
- Storage Temperature Range: -65°C to +150°C
- Thermal Resistance: 500°C/W Junction to Ambient

Parameter	Symbol	Limits	Unit
Continuous Reverse Voltage	V_R	175	V
Forward Current	I_F	100	mA
Power Dissipation(T_A=90ºC)	P_D	250	mW

MCC Part Number	Device Marking
BAP64-04	4K
BAP64-05	5K
BAP64-06	6K

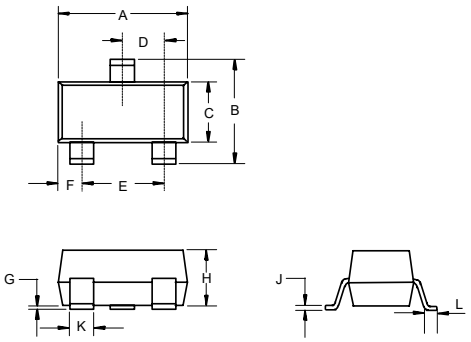
Note: 1. Halogen free "Green” products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

Pin Configuration



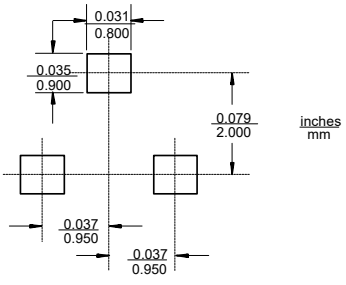
BAP64-04 BAP64-05 BAP64-06

SOT-23



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.110	0.120	2.80	3.04	
B	0.083	0.104	2.10	2.64	
C	0.047	0.055	1.20	1.40	
D	0.034	0.041	0.85	1.05	
E	0.067	0.083	1.70	2.10	
F	0.018	0.024	0.45	0.60	
G	0.0004	0.006	0.01	0.15	
H	0.035	0.043	0.90	1.10	
J	0.003	0.007	0.08	0.18	
K	0.012	0.020	0.30	0.51	
L	0.007	0.020	0.20	0.50	

Suggested Solder Pad Layout



Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Min.	Typ	Max.	Conditions
Reverse Voltage Leakage Current	I_R			10μA 1.0μA	V_R=175V V_R=20V
Forward Voltage	V_F			1.1V	I_F=50mA
Diode Capacitance	C_{d1}		0.52pF		V_R=0V,f=1MHz
	C_{d2}		0.37pF	0.5pF	V_R=1V,f=1MHz
	C_{d3}		0.23pF	0.35pF	V_R=20V,f=1MHz
Diode Forward Resistance	R_{D1}		20Ω	40Ω	I_F=0.5mA, f=100MHz
	R_{D2}		10Ω	20Ω	I_F=1.0mA, f=100MHz
	R_{D3}		2.0Ω	3.8Ω	I_F=10mA, f=100MHz
	R_{D4}		0.7Ω	1.35Ω	I_F=100mA, f=100MHz
Charge carrier life time	T_L		1.55μS		When switched from I_F=10mA to I_R=6mA; R_L=100Ω;measured at I_R=3mA
Series inductance	L_S		1.4nH		I_F=100mA,f=100MHz

Curve Characteristics

Fig. 1 - Forward Characteristics

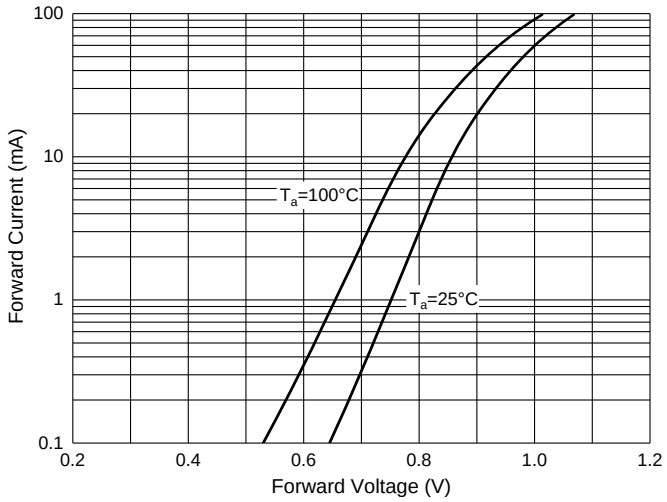


Fig. 2 - Reverse Characteristics

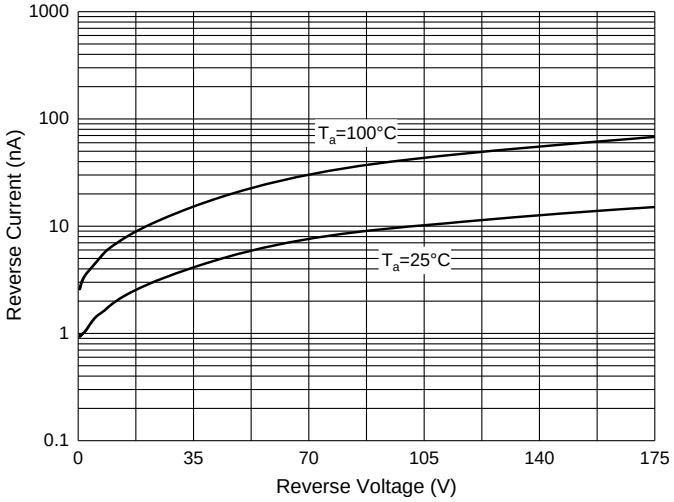


Fig. 3 - Capacitance Characteristics

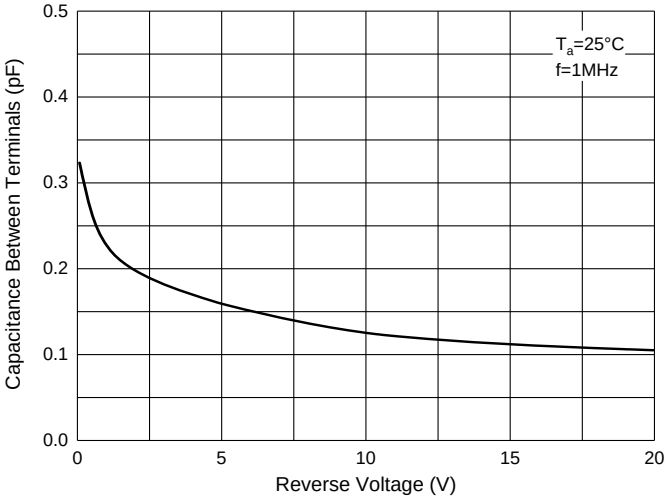
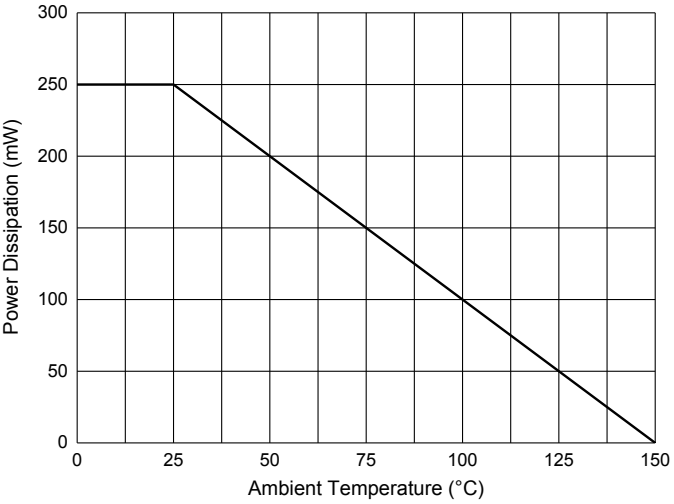


Fig. 4 - Power Derating Curve



Ordering Information

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

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