



BAP64-04 BAP64-05 BAP64-06

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

General Purpose Pin Diodes 250mW

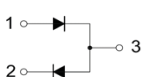
Maximum Ratings @ 25°C Unless Otherwise Specified

Parameter	Symbol	Limits	Unit
Continuous Reverse Voltage	V_R	175	V
Forward Current	I_F	100	mA
Power Dissipation($T_A=90^\circ\text{C}$)	P_D	250	mW
Junction and Storage temperature	T_j, P_{stg}	-65~+150	°C
Thermal Resistance Junction to Ambient	R_{thJA}	500	°C/W

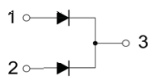
Electrical Characteristics @ 25°C Unless Otherwise Specified

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

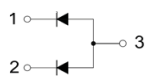
Pin Configuration



BAP64-04
Marking: 4K

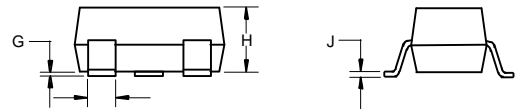
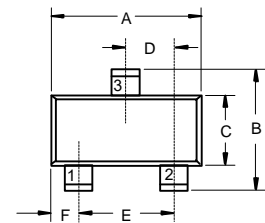


BAP64-05
Marking: 5K



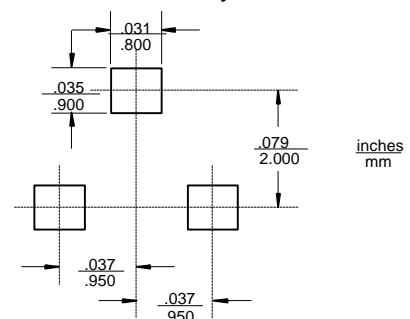
BAP64-06
Marking: 6K

SOT-23



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.110	.120	2.80	3.04	
B	.083	.104	2.10	2.64	
C	.047	.055	1.20	1.40	
D	.035	.041	.89	1.03	
E	.070	.081	1.78	2.05	
F	.018	.024	.45	.60	
G	.0005	.0039	.013	.100	
H	.035	.044	.89	1.12	
J	.003	.007	.085	.180	
K	.015	.020	.37	.51	

Suggested Solder Pad Layout



Typical Characteristics

Fig. 1 - Instantaneous Forward Characteristics

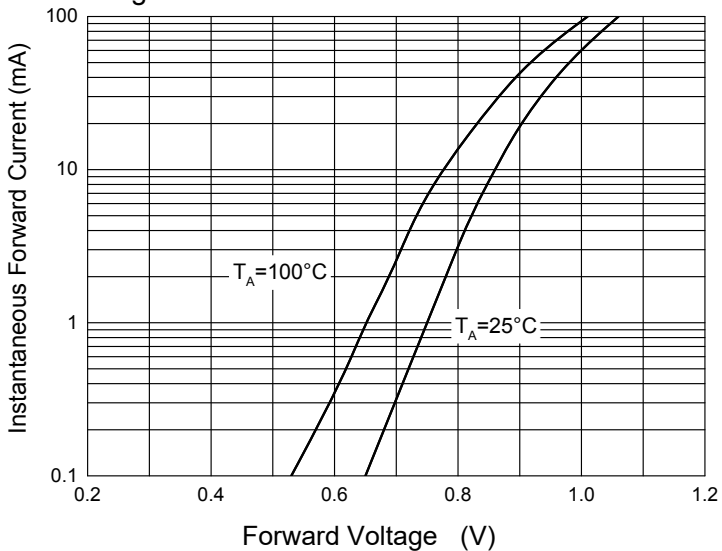


Fig. 2 - Reverse Leakage Characteristics

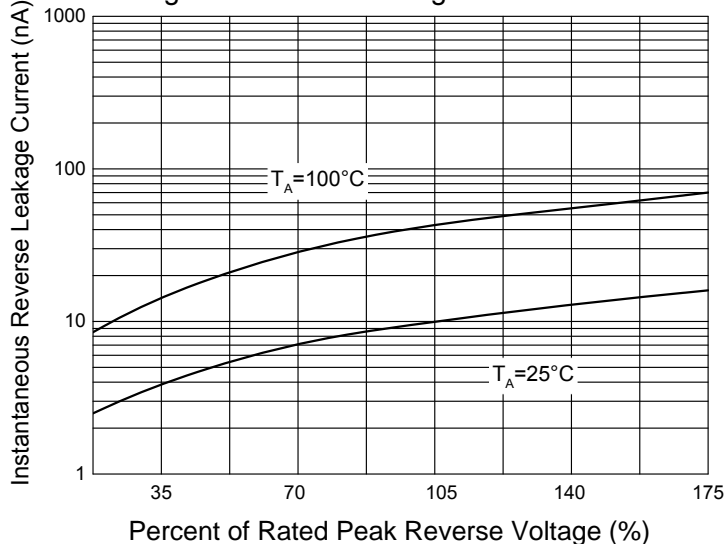
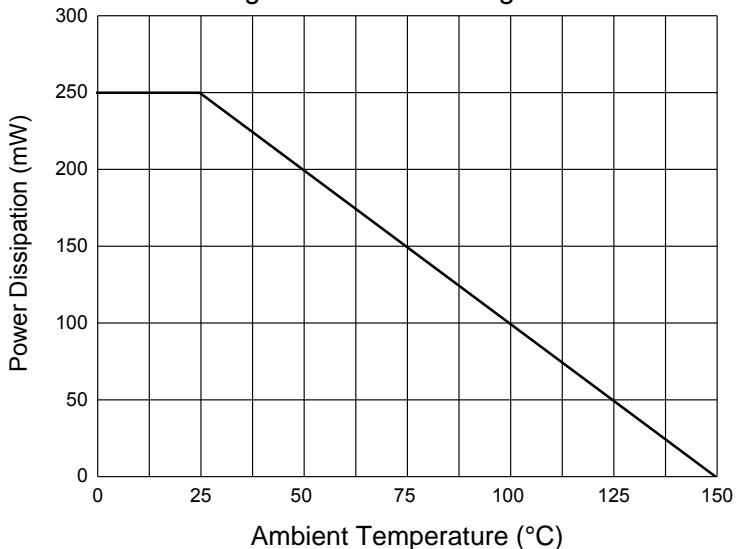


Fig. 3 - Power Derating Curve





Micro Commercial Components

Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel;3Kpcs/Reel

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