

BAP64-04W BAP64-05W BAP64-06W

General Purpose Pin Diodes 200mW

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

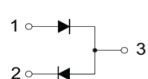
Maximum Ratings @ 25°C Unless Otherwise Specified

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	200	mW
Junction and Storage temperature	T_j, P_{stg}	-55~+150	°C
Thermal Resistance Junction to Ambient	R_{thJA}	625	°C/W

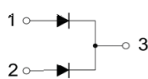
Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Min.	TYP	Max.	Unit	Conditions
Reverse Voltage	I_R			10	μA	$V_R=175\text{V}$
Leakage Current				1.0		$V_R=20\text{V}$
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				nH	$I_F=100\text{mA}, f=100\text{MHz}$
					nH	$I_F=100\text{mA}, f=100\text{MHz}$

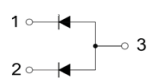
Pin Configuration



BAP64-04W
Marking: 4W

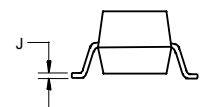
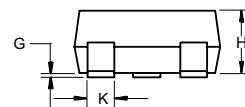
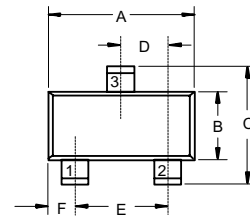


BAP64-05W
Marking: 5W



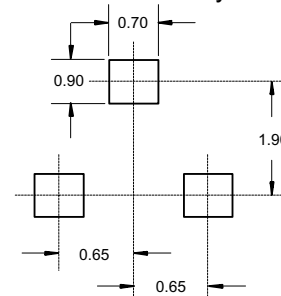
BAP64-06W
Marking: 6W

SOT-323



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.071	.087	1.80	2.20	
B	.045	.053	1.15	1.35	
C	.083	.096	2.10	2.45	
D	.026 Nominal		0.65 Nominal		
E	.047	.055	1.20	1.40	
F	.012	.016	0.30	0.40	
G	.000	.004	0.00	0.10	
H	.035	.039	0.90	1.00	
J	.004	.010	0.10	0.25	
K	.006	.016	0.15	0.40	

Suggested Solder Pad Layout



Typical Characteristics

Fig. 1 - Instantaneous Forward Characteristics

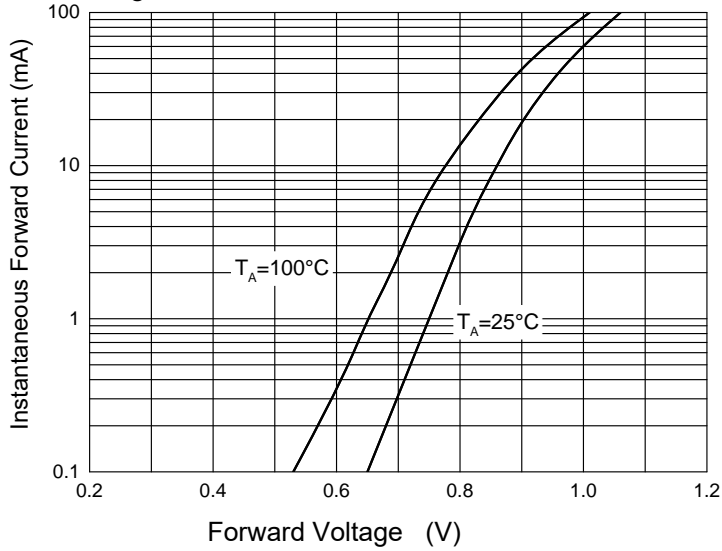


Fig. 2 - Reverse Leakage Characteristics

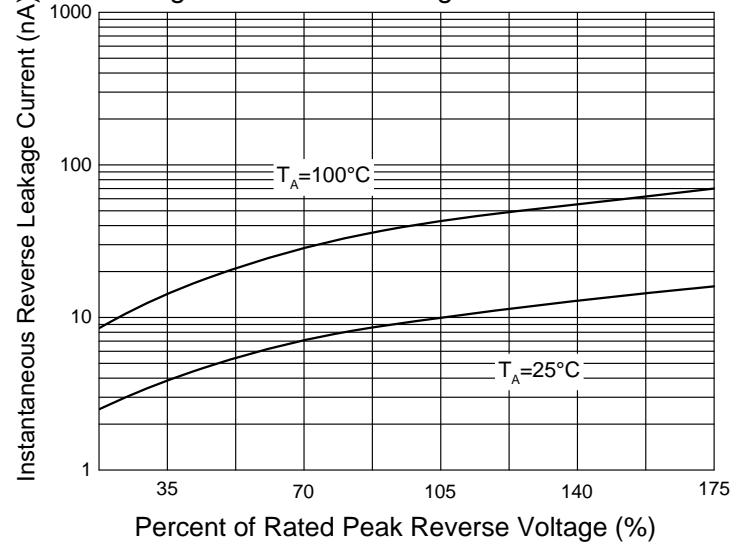
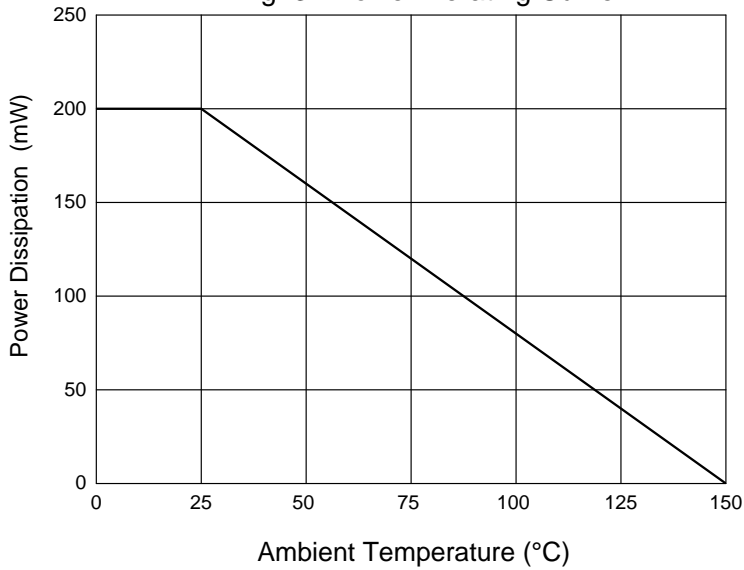


Fig. 3 - Power Derating Curve



Ordering Information

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

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