



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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

General Purpose Pin Diodes
200mW

Features

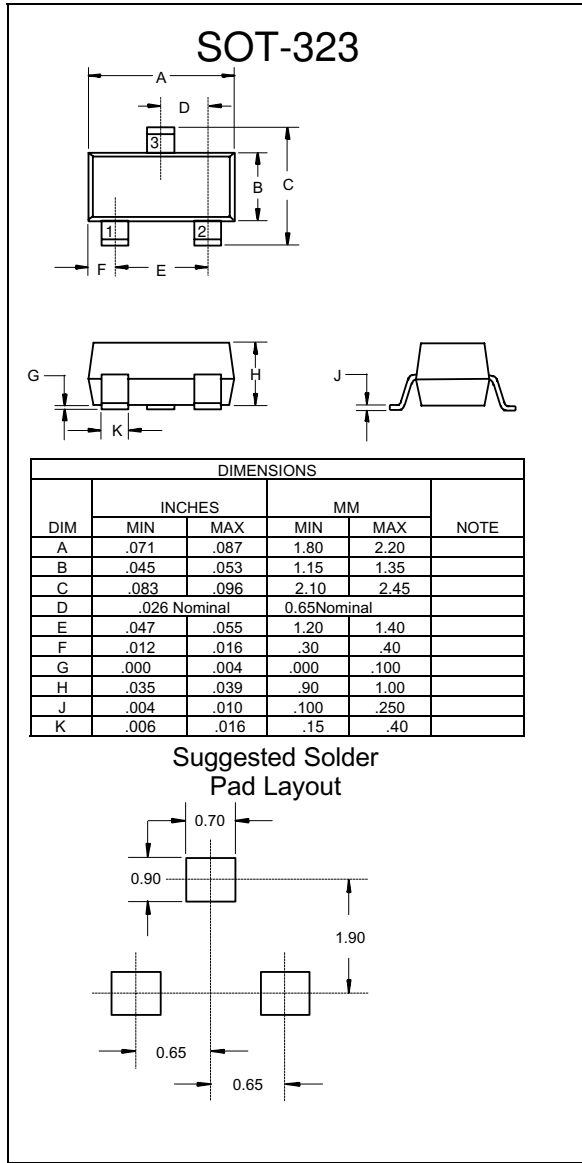
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Low diode capacitance
- Low diode forward resistance

Maximum Ratings @ 25°C Unless Otherwise Specified

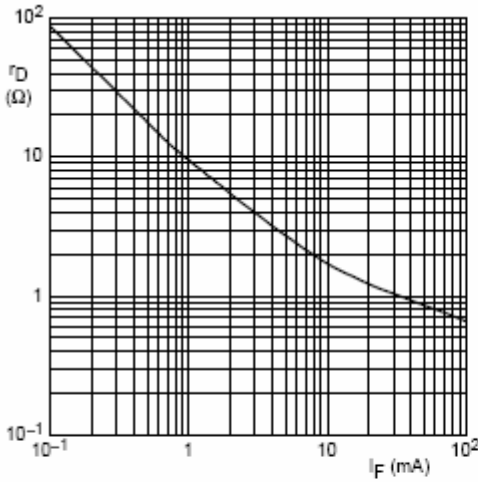
Parameter	Symbol	Limits	Unit
Continuous Reverse Voltage	V_R	175	V
Forward Current	I_F	100	mA
Power Dissipation ($T_A=90^\circ\text{C}$)	P_D	200	mW
Junction and Storage temperature	T_j, P_{stg}	-55~+150	°C
Thermal Resistance Junction to Ambient	R_{thJA}	625	°C/W

Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Min.	TYP	Max.	Unit	Conditions
Reverse Voltage Leakage Current	I_R			10	μA	$V_R=175\text{V}$
				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_D		20	40	Ω	$I_F=0.5\text{mA}, f=100\text{MHz}$
	r_D		10	20	Ω	$I_F=1\text{mA}, f=100\text{MHz}$
	r_D		2	3.8	Ω	$I_F=10\text{mA}, f=100\text{MHz}$
	r_D		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 $I_F=6\text{mA}$; $R_L=100\Omega$; measured at $I_R=3\text{mA}$
Series inductance	L_s		1.6		nH	$I_F=100\text{mA}, f=100\text{MHz}$
BAP64-04W/06W BAP64-05W			1.4		nH	$I_F=100\text{mA}, f=100\text{MHz}$

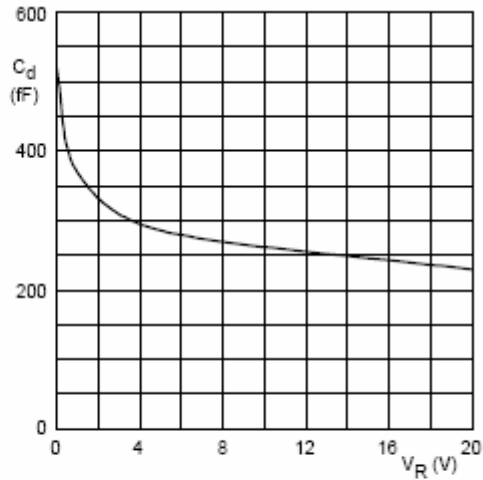


Typical Characteristics



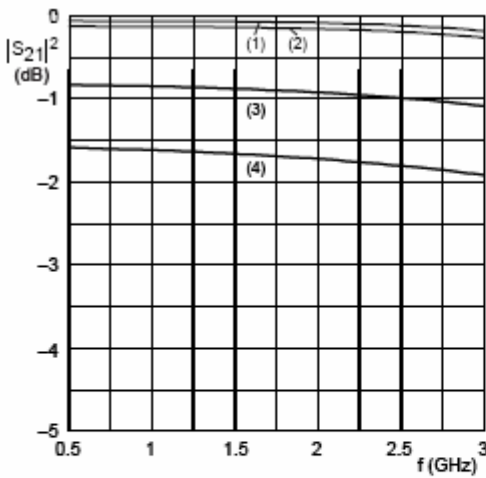
$f = 100 \text{ MHz}; T_j = 25 \text{ }^\circ\text{C}.$

Forward resistance as a function of forward current; typical values.



$f = 1 \text{ MHz}; T_j = 25 \text{ }^\circ\text{C}.$

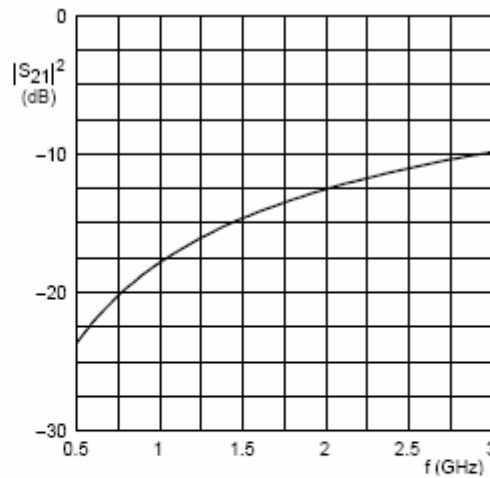
Diode capacitance as a function of reverse voltage; typical values.



(1) $I_F = 100 \text{ mA}.$ (3) $I_F = 1 \text{ mA}.$
(2) $I_F = 10 \text{ mA}.$ (4) $I_F = 0.5 \text{ mA}.$

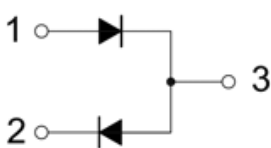
Diode inserted in series with a $50 \text{ } \Omega$ stripline circuit and biased via the analyzer Tee network.
 $T_{\text{amb}} = 25 \text{ }^\circ\text{C}.$

Insertion loss ($|S_{21}|^2$) of the diode as a function of frequency; typical values.

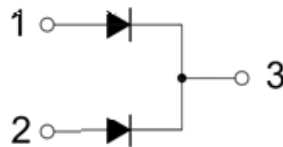


Diode zero biased and inserted in series with a $50 \text{ } \Omega$ stripline circuit.
 $T_{\text{amb}} = 25 \text{ }^\circ\text{C}.$

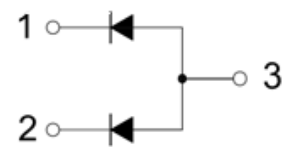
Isolation ($|S_{21}|^2$) of the diode as a function of frequency; typical values.



BAP64-04W
MARKING:4W



BAP64-05W
MARKING:5W



BAP64-06W
MARKING:6W



Micro Commercial Components

Ordering Information

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

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