



Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

Phone: (818) 701-4933 Fax: (818) 701-4939

# **BAP51-02**

# **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
- MARKING: A5

## Maximum Ratings @ 25°C Unless Otherwise Specified

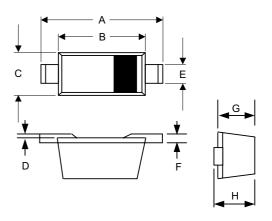
Parameter	Symbol	Limits	Unit
Continuous Reverse Voltage	$V_R$	60	V
Forward Current	I <sub>F</sub>	50	mA
Power Dissipation(T <sub>A</sub> =90°C)	$P_D$	715	mW
Junction and Storage temperature	T <sub>j</sub> , P <sub>stg</sub>	-65~+150	$^{\circ}$ C
Thermal Resistance Junction to solder point	RthJs	85	K/W

### Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Min.	Max.	Unit	Conditions
Continuous reverse voltage	V <sub>R</sub>	50		V	I <sub>R</sub> =10µA
Forward voltage	V <sub>F</sub>		1.1	٧	I <sub>F</sub> =50mA
Reverse current	I <sub>R</sub>		100	nA	V <sub>R</sub> =50V
Diode capacitance	C <sub>d1</sub>		0.4(Typ)	pF	VR=0V,f=1MHz
	C <sub>d2</sub>		0.55	pF	V <sub>R</sub> =1V,f=1MHz
	C <sub>d3</sub>		0.35	pF	V <sub>R</sub> =5V,f=1MHz
Diode forward resistance	$r_D$		9	Ω	I <sub>F</sub> =0.5mA, f=100MHz
	$r_D$		6.5	Ω	I <sub>F</sub> =1mA , f=100MHz
	$r_D$		2.5	Ω	I <sub>F</sub> =10mA , f=100MHz

# General Purpose Pin Diodes 715mW

## **SOD523**

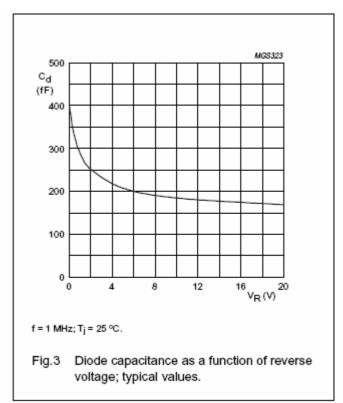


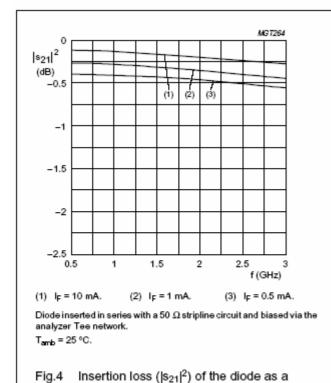
DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
Α	.059	.067	1.50	1.70	
В	.043	.051	1.10	1.30	
С	.030	.033	0.75	0.85	
D	.001	.003	0.01	0.07	
Е	.010	.014	0.25	0.35	
F	.003	.006	0.08	0.15	
G	.020	.028	0.50	0.70	
Н	.020	.031	0.51	0.77	

## **Typical Characteristics**

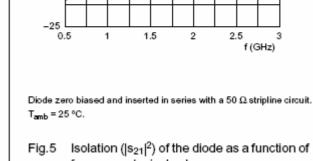


10 ľD 5 2 10-1 10 I<sub>F</sub> (mA) f = 100 MHz; T<sub>j</sub> = 25 °C. Fig.2 Forward resistance as a function of forward current; typical values.





function of frequency; typical values.



|s<sub>21</sub>|<sup>2</sup> (dB)

-15

-20

Isolation (|s21|2) of the diode as a function of frequency; typical values.

2

2.5

f (GHz)



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## **Ordering Information**

Device	Packing
Part Number-TP	Tape&Reel8Kpcs/Reel

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