

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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# **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

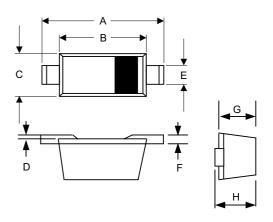
Parameter	Symbol	Limits	Unit
Continuous Reverse Voltage	$V_R$	60	٧
Forward Current	I <sub>F</sub>	50	mA
Power Dissipation(T <sub>A</sub> =90°C)	$P_D$	715	mW
Junction and Storage temperature	T <sub>j</sub> , P <sub>stg</sub>	-65~+150	$^{\circ}$
Thermal Resistance Junction to solder point	RthJs	85	K/W

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

Parameter	Symbol	Min.	Max.	Unit	Conditions
Continuous reverse voltage	$V_R$	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

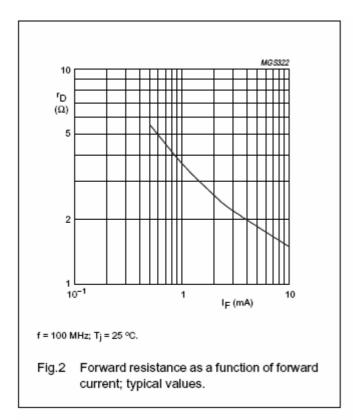
## **SOD523**

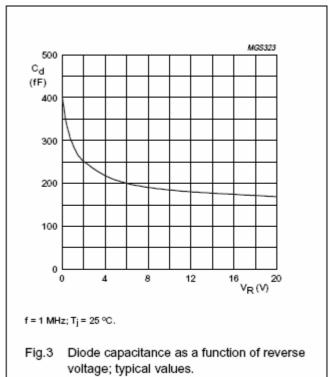


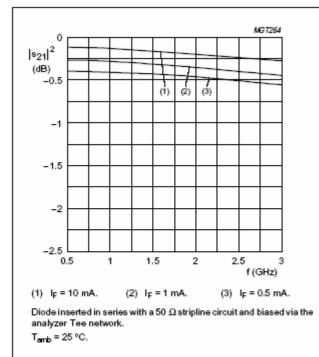
DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
Α	.059	.067	1.50	1.70	
В	.043	.051	1.10	1.30	
С	.030	.033	0.75	0.85	
D	.001	.003	0.01	0.07	
Е	.010	.014	0.25	0.35	
F	.003	.006	0.08	0.15	
G	.020	.028	0.50	0.70	
Н	.020	.031	0.51	0.77	

# **Typical Characteristics**



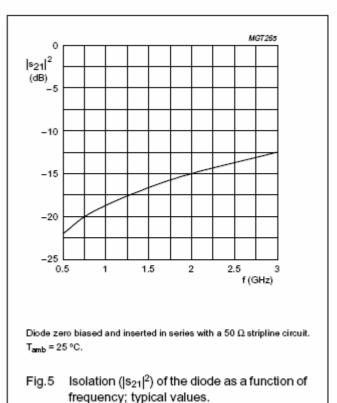






Insertion loss (|s21|2) of the diode as a

function of frequency; typical values.





#### **Micro Commercial Components**

## **Ordering Information**

Device	Packing
Part Number-TP	Tape&Reel8Kpcs/Reel

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