

BAP50-03

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
- MARKING: A81

Maximum Ratings @ 25°C Unless Otherwise Specified

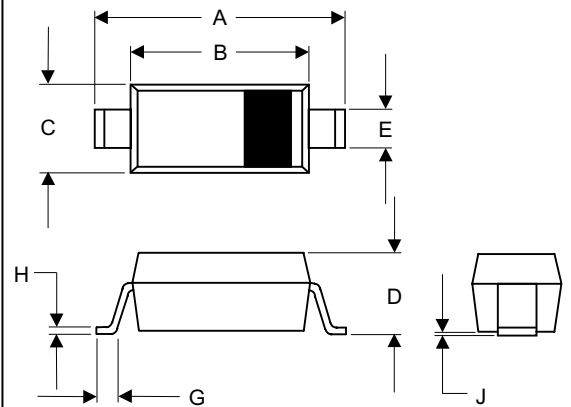
Parameter	Symbol	Limits	Unit
Continuous Reverse Voltage	V_R	50	V
Forward Current	I_F	50	mA
Power Dissipation ($T_A=90^\circ\text{C}$)	P_D	200	mW
Junction and Storage temperature	T_j, P_{stg}	-65~+150	°C
Thermal Resistance Junction to Ambient	R_{thJA}	85	K/W

Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Min.	Max.	Unit	Conditions
Continuous reverse voltage	V_R	50		V	$I_R=10\mu\text{A}$
Forward voltage	V_F		1.1	V	$I_F=50\text{mA}$
Reverse current	I_R		100	nA	$V_R=50\text{V}$
Diode capacitance	C_{d1}		1.11	pF	$V_R=0\text{V}, f=1\text{MHz}$
	C_{d2}		0.55	pF	$V_R=1\text{V}, f=1\text{MHz}$
	C_{d3}		0.35	pF	$V_R=5\text{V}, f=1\text{MHz}$
Diode forward resistance	r_D		40	Ω	$I_F=0.5\text{mA}, f=100\text{MHz};$ Note 1
	r_D		25	Ω	$I_F=1.0\text{mA}, f=100\text{MHz};$ Note 1
	r_D		5	Ω	$I_F=10\text{mA}, f=100\text{MHz};$ Note 1

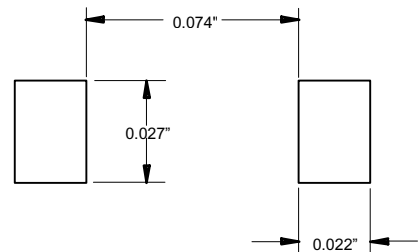
Note 1. Guaranteed on AQL basis: inspection level S4, AQL 1.0.

SOD-323

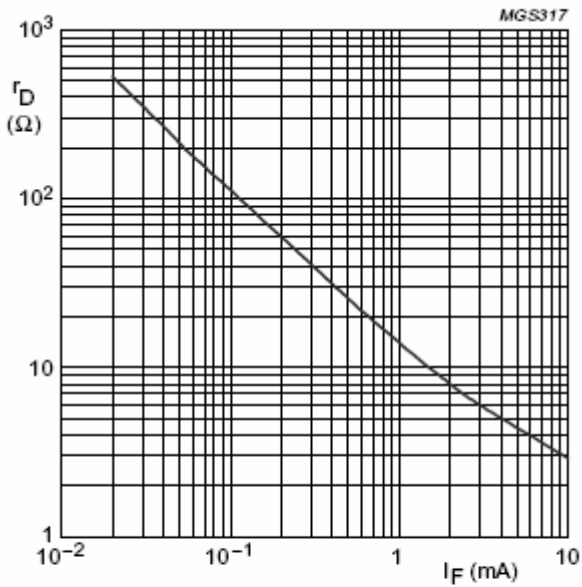


DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.090	.107	2.30	2.70	
B	.063	.071	1.60	1.80	
C	.045	.053	1.15	1.35	
D	.031	.045	0.80	1.15	
E	.010	.016	0.25	0.40	
G	.004	.018	0.10	0.45	
H	.004	.010	0.10	0.25	
J	-----	.006	-----	0.15	

SUGGESTED SOLDER PAD LAYOUT

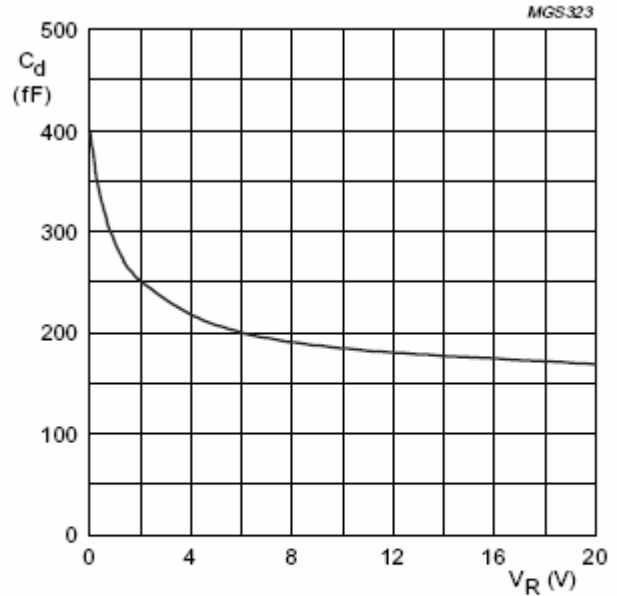


Typical Characteristics



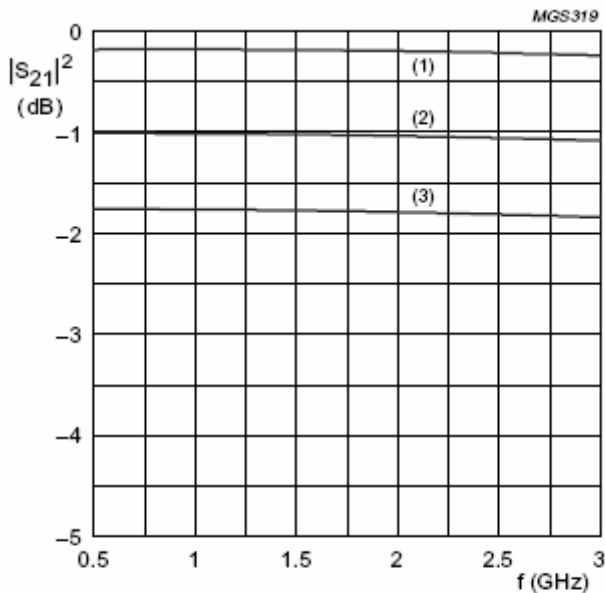
$f = 100 \text{ MHz}; T_j = 25 \text{ }^\circ\text{C}.$

Fig.1 Forward resistance as a function of forward current; typical values.



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

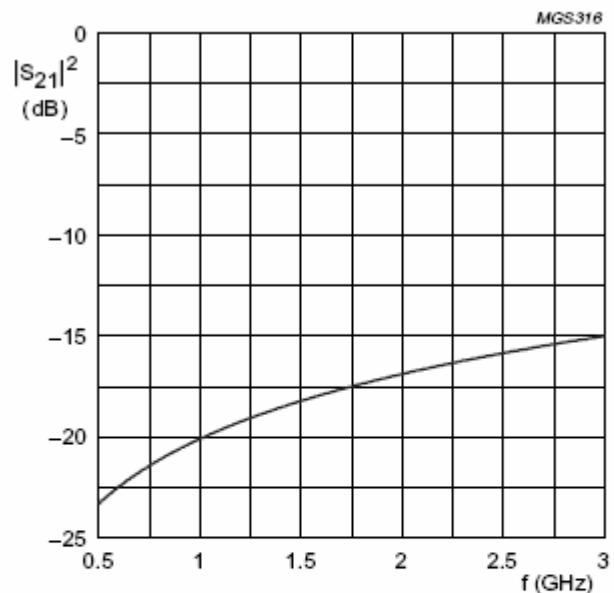
Fig.2 Diode capacitance as a function of reverse voltage; typical values.



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

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

Fig.3 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.
 $T_{\text{amb}} = 25 \text{ }^\circ\text{C}.$

Fig.4 Isolation ($|S_{21}|^2$) of the diode as a function of frequency; typical values.



Micro Commercial Components

Ordering Information

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

IMPORTANT NOTICE

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes. **Micro Commercial Components Corp.** does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp.** and all the companies whose products are represented on our website, harmless against all damages.

LIFE SUPPORT

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

CUSTOMER AWARENESS

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.

www.mccsemi.com

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



Тел: +7 (812) 336 43 04 (многоканальный)
Email: org@lifeelectronics.ru