

GE

FEA

- Lc
- Lc
- Tc

sma

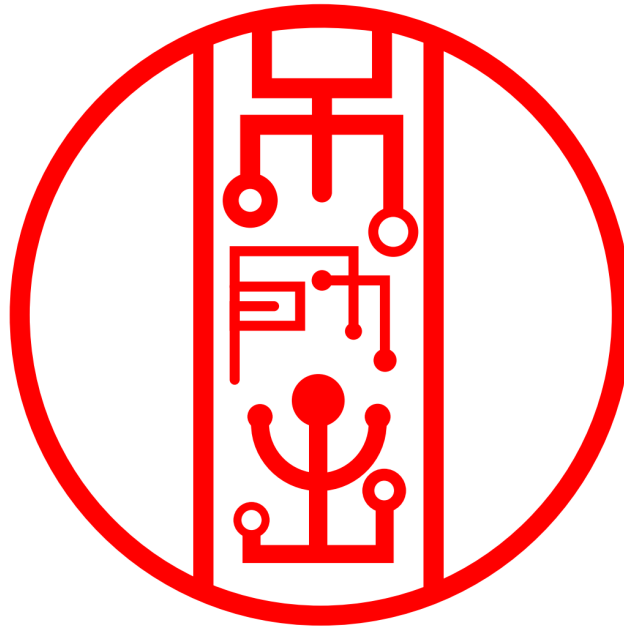
API

- G

DES

Two

a S



ELECTRICAL CHARACTERISTICS

$T_j = 25\text{ }^{\circ}\text{C}$ unless otherwise specified.

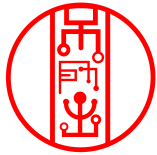
SYMBOL	PARAMETER	CONDITIONS	MIN.	TYP.	MAX.	UNIT
V_F	forward voltage	$I_F = 50\text{ mA}$	–	0.95	1.1	V
V_R	reverse voltage	$I_R = 10\text{ }\mu\text{A}$	50	–	–	V
I_R	reverse current	$V_R = 50\text{ V}$	–	–	100	nA
C_d	diode capacitance	$V_R = 0; f = 1\text{ MHz}$	–	0.4	–	pF
		$V_R = 1\text{ V}; f = 1\text{ MHz}$	–	0.3	0.55	pF
		$V_R = 5\text{ V}; f = 1\text{ MHz}$	–	0.2	0.35	pF
r_D	diode forward resistance	$I_F = 0.5\text{ mA}; f = 100\text{ MHz}; \text{note 1}$	–	25	40	Ω
		$I_F = 1\text{ mA}; f = 100\text{ MHz}; \text{note 1}$	–	14	25	Ω
		$I_F = 10\text{ mA}; f = 100\text{ MHz}; \text{note 1}$	–	3	5	Ω

Note

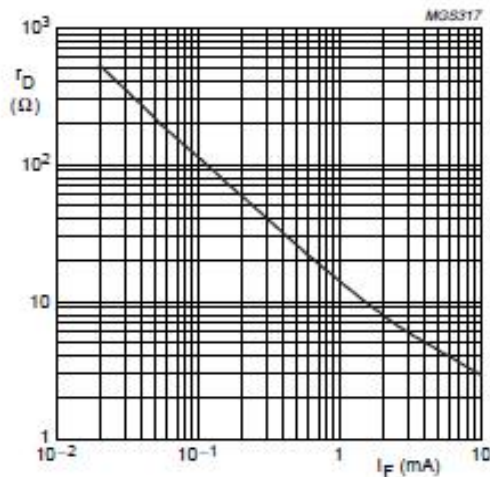
1. Guaranteed on AQL basis: inspection level S4, AQL 1.0.

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
$R_{th\text{ j-s}}$	thermal resistance from junction to soldering point	85	K/W

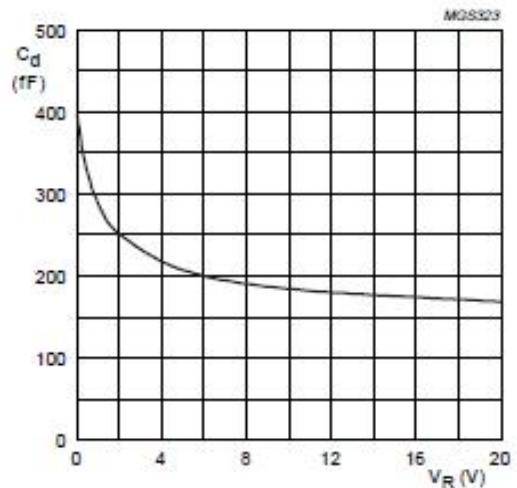


Typical Characteristics



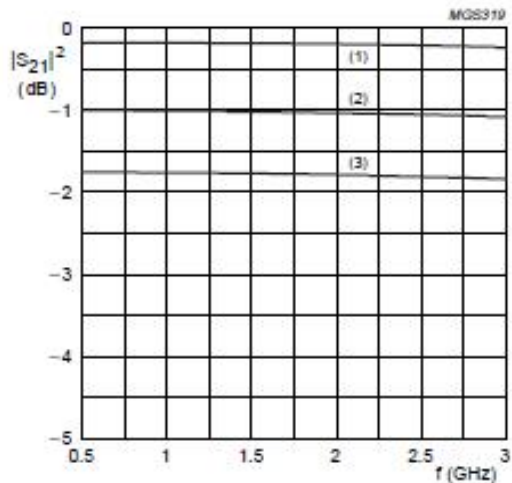
$f = 100$ MHz; $T_j = 25$ °C.

Fig.2 Forward resistance as a function of forward current; typical values.



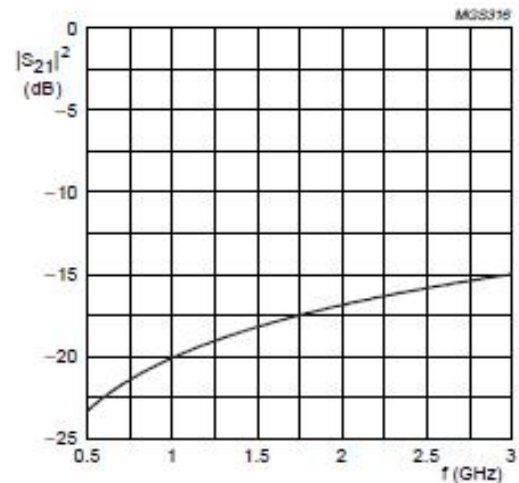
$f = 1$ MHz; $T_j = 25$ °C.

Fig.3 Diode capacitance as a function of reverse voltage; typical values.



(1) $I_F = 10$ mA. (2) $I_F = 1$ mA. (3) $I_F = 0.5$ mA.
Diode Inserted in series with a 50 Ω stripline circuit and biased via the analyzer Tee network.
 $T_{amb} = 25$ °C.

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



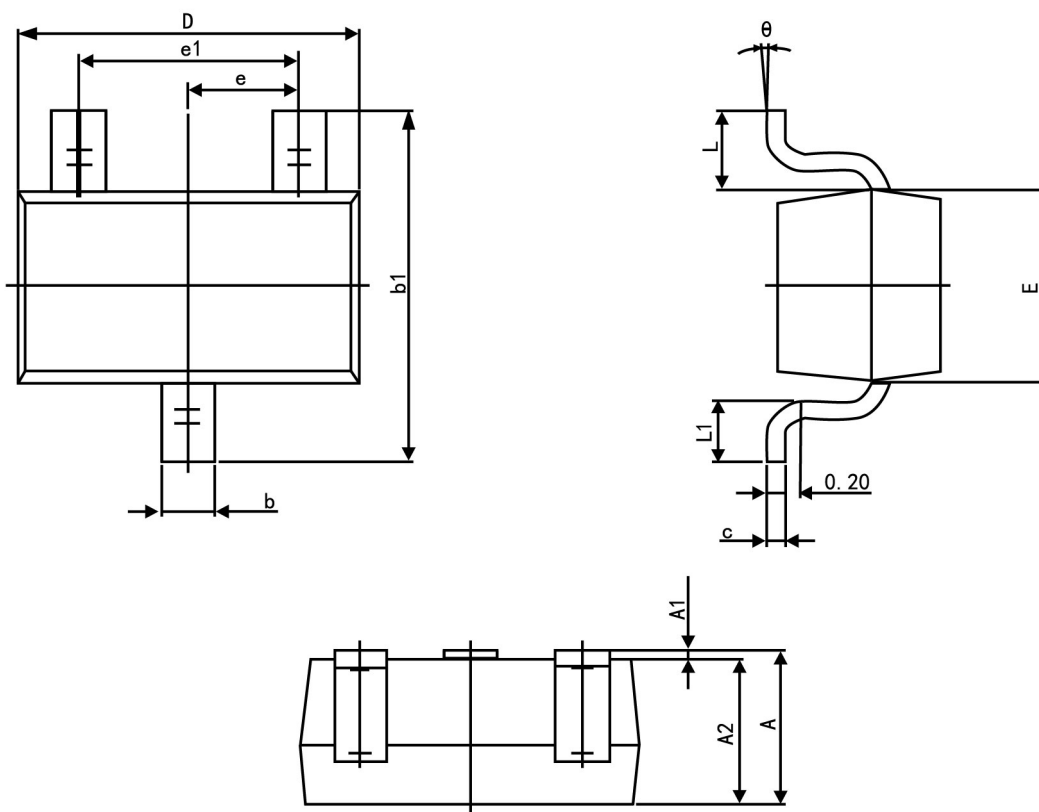
Diode zero biased and Inserted in series with a 50 Ω stripline circuit.
 $T_{amb} = 25$ °C.

Fig.5 Isolation ($|S_{21}|^2$) of the diode as a function of frequency; typical values.



BAP50-04W

SOT-323 Package Outline Dimensions



Symbol	Dimension in Millimeters	
	Min	Max
A	0.900	1.100
A1	0.000	0.100
A2	0.900	1.000
b	0.200	0.400
c	0.080	0.150
D	2.000	2.200
E	1.150	1.350
E1	2.150	2.450
e	0.650 TYP.	
e1	1.200	1.400
L	0.525 REF.	
L1	0.260	0.460
θ	0°	8°