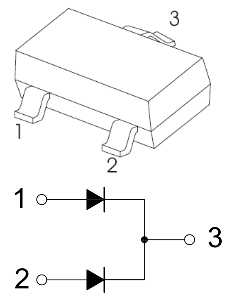
TAIMAO

ShenzhenTaimaoTechnology Co.,Ltd.

SOT-23 Plastic-Encapsulate Diodes

BAP64-05 PIN DIODE

SOT-23



FEATURES

- High voltage, current controlled
- RF resistor for RF attenuators and switches
- Low diode capacitance
- Low diode forward resistance
- Low series inductance
- For applications up to 3 GHz
- RF attenuators and switches

Marking: 5K

Maximum Ratings @Ta=25℃

Parameter	Symbol	Limit	Unit
Continuous Reverse Voltage	V_R	175	V
Continuous Forward Current	I_F	100	mA
Power Dissipation	P_D	2 50	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	500	℃/W
Junction Temperature	T_j	150	℃
Storage Temperature	T_{STG}	-55~+150	℃

ELECTRICAL CHARACTERISTICS (Ta=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage leakage current	I_R	V_R=175V V_R=20V			10 1	μA
Forward voltage	V_F	I_F=50mA			1.1	V
Diode capacitance	C_d	V_R=0, f=1MHz V_R=1V, f=1MHz V_R=20V, f=1MHz		0.52 0.37 0.23	 0.35	pF
Diode forward resistance	r_D	I_F=0.5mA, f=100MHz;note1 I_F=1mA, f=100MHz ;note1 I_F=10mA, f=100MHz;note1 I_F=100mA, f=100MHz;note1		20 10 2 0.7	40 20 3.8 1.35	Ω
Charge carrier life time	τ_L	when switched from I_F = 10 mA to I_R = 6 mA; R_L = 100 Ω; measured at I_R =3mA		1.55		μS
Series inductance	L_S	I_F=100mA, f=100MHz		1.4		nH

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

A,Apr,2011