



ShenzhenTaimaoTechnology Co.,Ltd.
SOT-323 Plastic-Encapsulate Diodes

BAP64-04W,05W,06W Pin Diode

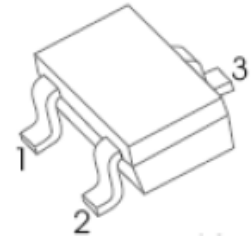
FEATURE

- 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

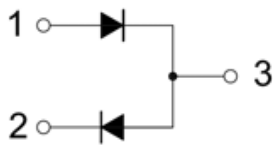
APPLICATION

- RF attenuators and switches

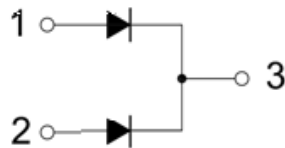
SOT-323



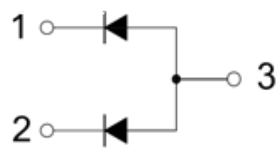
BAP64-04W



BAP64-05W



BAP64-06W



MARKING:4W

MARKING:5W

MARKING:6W

Maximum Ratings ($T_a=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Value	Unit
Continuous reverse voltage	V_R	175	V
Continuous forward current	I_F	100	mA
Power dissipation	P_D	200	mW
Thermal resistance from junction to ambient	$R_{\theta JA}$	625	$^{\circ}\text{C}/\text{W}$
Junction temperature	T_j	150	$^{\circ}\text{C}$
Storage temperature	T_{stg}	-55~+150	$^{\circ}\text{C}$

Electrical characteristic (T_a=25°C unless otherwise specified)

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward Voltage	V _F	I _F =50mA			1.1	V
Reverse Current	I _{R1}	V _{R1} =175V			10	μA
	I _{R2}	V _{R2} =20V			1	
Diode Capacitance	C _{d1}	V _R =0V, f=1MHz		0.52		pF
	C _{d2}	V _R =1V,f=1MHz			0.5	
	C _{d3}	V _R =20V,f=1MHz			0.35	
Diode Forward Resistance (note 1)	r _{d1}	I _F =0.5mA, f=100MHz			40	Ω
	r _{d2}	I _F =1mA, f=100MHz			20	
	r _{d3}	I _F =10mA, f=100MHz			3.8	
	r _{d4}	I _F =100mA, f=100MHz			1.35	
Charge Carrier Life Time	τ _L	When switched from I _F =10mA to I _R =6mA; R _L =100Ω;measured at I _R =3mA		1.55		μs
Series Inductance	L _S	I _F =10mA, f=100MHz BAP64-04W/06W		1.6		nH
		BAP64-05W		1.4		

Note:

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