



ShenzhenTaimaoTechnology Co.,Ltd.

SOT-323 Plastic-Encapsulate Diodes

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

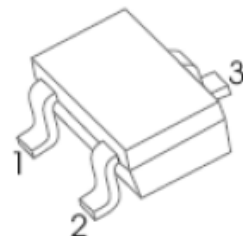
FEATURE

- 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

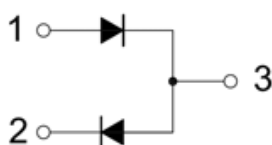
APPLICATION

- RF attenuators and switches

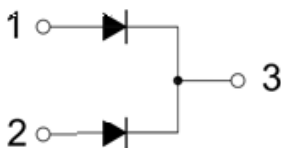
SOT-323



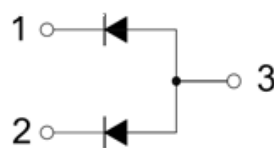
BAP64-04W



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	$^{\circ}\text{C/W}$
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 $I_R=6mA$; $R_L=100\Omega$;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.