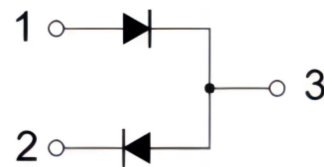
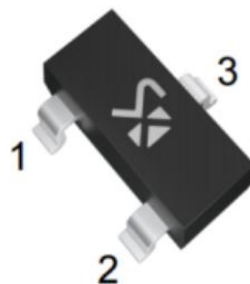




BAP64-04

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 3GHz



Marking:4K

SOT-23

Maximum Ratings $T_A=25^{\circ}\text{C}$ unless otherwise specified

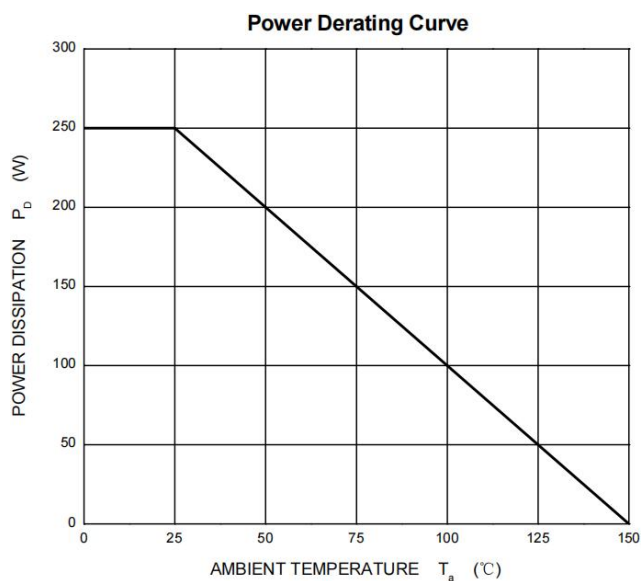
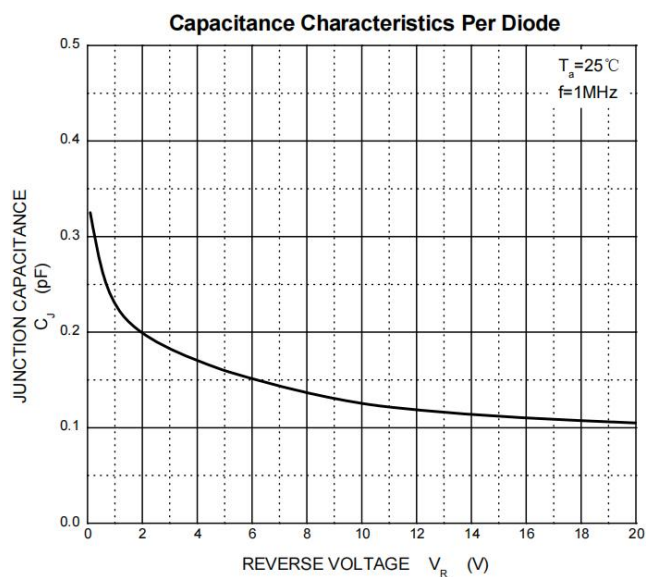
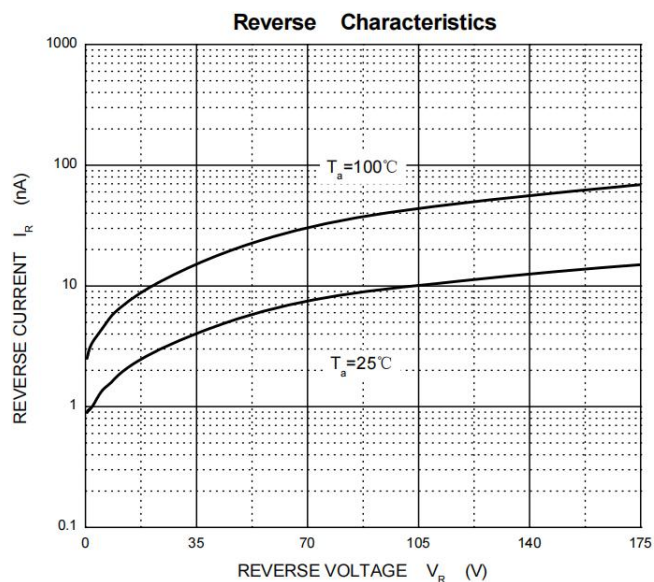
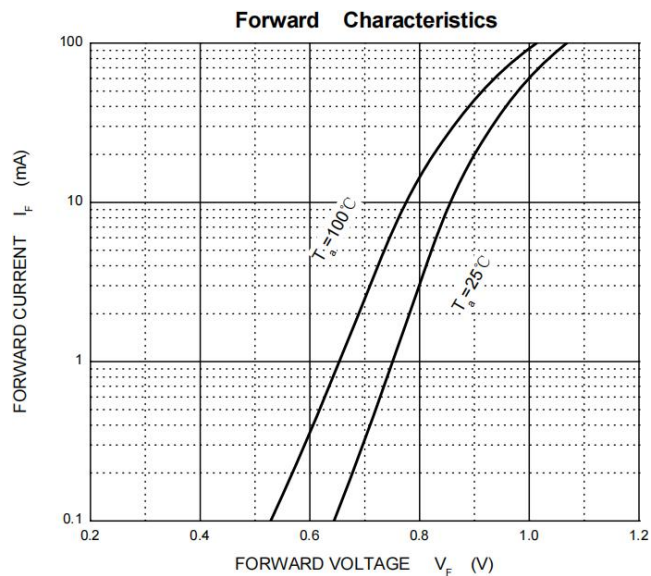
Parameter	Symbol	Value	Unit
Continuous Reverse Voltage	V_R	175	V
Continuous Forward Current	I_F	100	mA
Power Dissipation	P_D	250	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	500	$^{\circ}\text{C}/\text{W}$
Junction and Storage Temperature Range	T_J, T_{STG}	$-55\sim+150$	$^{\circ}\text{C}$

Electrical Characteristics $T_A=25^{\circ}\text{C}$ unless otherwise specified

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Forward Voltage	V_F	$I_F=50\text{mA}$			1.1	V
Reverse Current	I_R	$V_R=175\text{V}$			10	μA
		$V_R=20\text{V}$			1	μA
Diode Capacitance	C_T	$f=1\text{MHz}, V_R=0\text{V}$		0.52		pF
		$f=1\text{MHz}, V_R=1\text{V}$			0.5	
		$f=1\text{MHz}, V_R=20\text{V}$			0.35	
Forward Resistance	r_f	$f=100\text{MHz}, I_F=0.5\text{mA}$			40	Ω
		$f=100\text{MHz}, I_F=1\text{mA}$			20	
		$f=100\text{MHz}, I_F=10\text{mA}$			3.8	
		$f=100\text{MHz}, I_F=100\text{mA}$			1.35	
Charge Carrier Life Time	τ_L	When Switched from $I_F=10\text{mA}$ to $I_R=6\text{mA}$; $R_L=100\Omega$; measured at $I_R=3\text{mA}$		1.55		μs
Series Inductance	L_S	$I_F=10\text{mA}, f=100\text{MHz}$		1.4		nH



Typical Characteristics

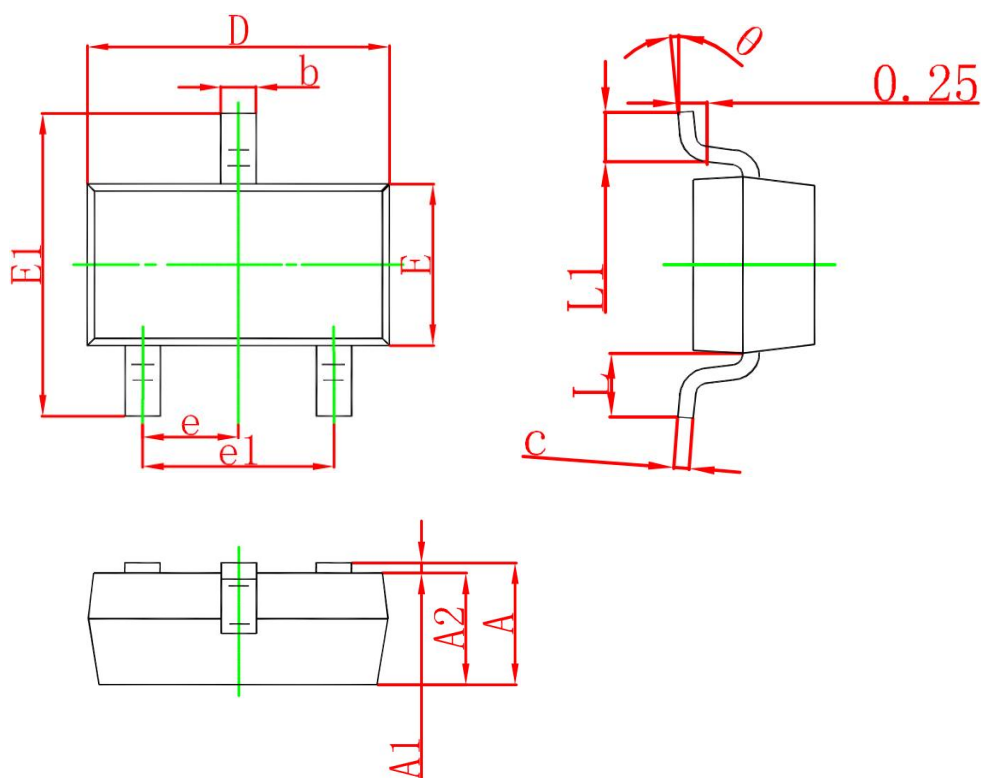




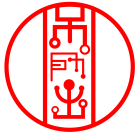
Package Information

SOT-23

Dimensions in mm



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°



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