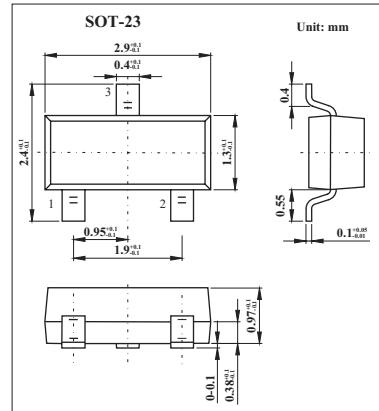


## BAP64-06

### ■ 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.



### ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Min	Max	Unit
continuous reverse voltage	V <sub>R</sub>		175	V
continuous forward current	I <sub>F</sub>		100	mA
total power dissipation Ts = 90 °C	P <sub>tot</sub>		250	mW
storage temperature	T <sub>stg</sub>	-65	+150	°C
junction temperature	T <sub>j</sub>	-65	+150	°C
thermal resistance from junction to soldering point	R <sub>th j-s</sub>		220	K/W

### ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
forward voltage	V <sub>F</sub>	I <sub>F</sub> = 50 mA		0.95	1.1	V
reverse leakage current	V <sub>R</sub>	V <sub>R</sub> = 175 V			10	μ A
		V <sub>R</sub> = 20 V			1	
diode capacitance	C <sub>d</sub>	V <sub>R</sub> = 0; f = 1 MHz		0.52		pF
		V <sub>R</sub> = 1 V; f = 1 MHz		0.37		
		V <sub>R</sub> = 20 V; f = 1 MHz		0.23	0.35	
diode forward resistance	r <sub>D</sub>	I <sub>F</sub> = 0.5 mA; f = 100 MHz; note 1		20	40	Ω
		I <sub>F</sub> = 1 mA; f = 100 MHz; note 1		10	20	
		I <sub>F</sub> = 10 mA; f = 100 MHz; note 1		2	3.8	
		I <sub>F</sub> = 100 mA; f = 100 MHz; note 1		0.7	1.35	
charge carrier life time	τ <sub>L</sub>	when switched from I <sub>F</sub> = 10 mA to I <sub>R</sub> = 6mA; R <sub>L</sub> = 100 Ω, measured at I <sub>R</sub> = 3 mA		1.55		μ s
series inductance	L <sub>s</sub>			1.4		nH

Note

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

### ■ Marking

Marking	6Kp
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