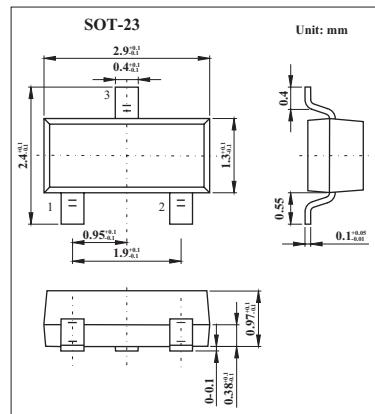


Silicon PIN diode**BAP64-05****■ Features**

- 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	VR		175	V
continuous forward current	IF		100	mA
total power dissipation Ts = 90 °C	P _{tot}		250	mW
storage temperature	T _{stg}	-65	+150	°C
junction temperature	T _j	-65	+150	°C
thermal resistance from junction to soldering point	R _{th j-s}		220	K/W

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
forward voltage	V _F	IF = 50 mA		0.95	1.1	V
reverse leakage current	V _R	V _R = 175 V			10	μA
		V _R = 20 V			1	μA
diode capacitance	C _d	V _R = 0; f = 1 MHz	0.52			pF
		V _R = 1 V; f = 1 MHz	0.37	0.5		
		V _R = 20 V; f = 1 MHz	0.23	0.35		
diode forward resistance	r _D	IF = 0.5 mA; f = 100 MHz; note 1	20	40		Ω
		IF = 1 mA; f = 100 MHz; note 1	10	20		
		IF = 10 mA; f = 100 MHz; note 1	2	3.8		
		IF = 100 mA; f = 100 MHz; note 1	0.7	1.35		
charge carrier life time	τ _L	when switched from IF = 10 mA to I _R = 6mA; R _L = 100 Ω, measured at I _R = 3 mA		1.55		μS
series inductance	L _s			1.4		nH

Note

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

■ Marking

Marking	5Kp
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