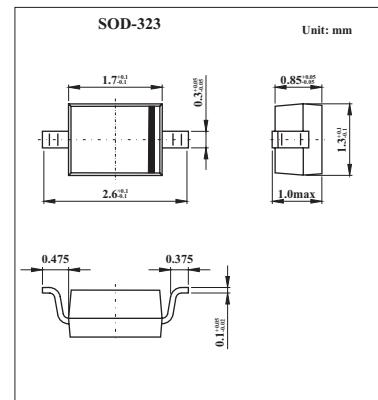


**Silicon PIN diode****BAP64-03****■ Features**

- 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>		500	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>		120	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	I <sub>R</sub>	V <sub>R</sub> = 175 V			10	V
		V <sub>R</sub> = 20 V			1	nA
diode capacitance	C <sub>d</sub>	V <sub>R</sub> = 0; f = 1 MHz	0.48			pF
		V <sub>R</sub> = 1 V; f = 1 MHz	0.35	0.5		
		V <sub>R</sub> = 20V; 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> = 6 mA; R <sub>L</sub> = 100 Ω ;measured at I <sub>R</sub> = 3 mA		1.55		ns
series inductance	L <sub>s</sub>			1.68		nH

Note

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

**■ Marking**

Marking	A3
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