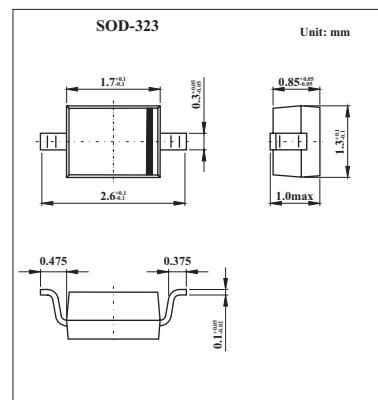


Silicon PIN diode**BAP70-03****■ Features**

- High voltage, current controlled RF resistor for attenuators
- Low diode capacitance
- Very low series inductance.

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

Parameter	Symbol	Min	Max	Unit
continuous reverse voltage	V _R		50	V
continuous forward current	I _F		100	mA
total power dissipation Ts = 90°C	P _{tot}		500	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}		120	K/W

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Conditions	Typ	Max	Unit
forward voltage	V _F	I _F = 50 mA	0.95	1.1	V
reverse leakage current	I _R	V _R = 30 V		20	nA
diode capacitance	C _d	V _R = 0; f = 1 MHz	570		fF
		V _R = 1 V; f = 1 MHz	400		
		V _R = 5 V; f = 1 MHz	270		
		V _R = 20V; f = 1 MHz	200	250	
diode forward resistance	r _D	I _F = 0.5 mA; f = 100 MHz	77	100	Ω
		I _F = 1 mA; f = 100 MHz	40	50	
		I _F = 10 mA; f = 100 MHz	5.4	7	
		I _F = 100 mA; f = 100 MHz	1.4	1.9	
charge carrier life time	τ _L	when switched from I _F = 10 mA to I _R = 6 mA; R _L = 100 Ω ;measured at I _R = 3 mA	1.25		μs
series inductance	L _s	I _F = 100 mA; f = 100 MHz	1.5		nH

■ Marking

Marking	A9
---------	----