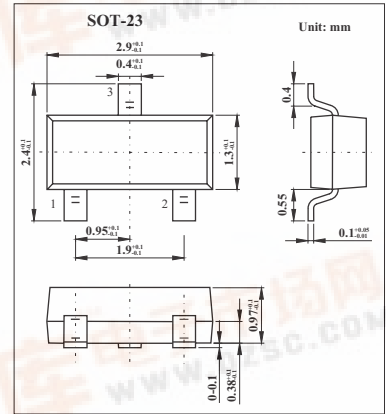


SMD Type Diodes

Silicon PIN diode
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 _R		175	V
continuous forward current	I _F		100	mA
total power dissipation	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	I _F = 50 mA		0.95	1.1	V
reverse leakage current	V _R	V _R = 175 V			10	μA
		V _R = 20 V			1	
diode capacitance	C _d	V _R = 0; f = 1 MHz		0.52		pF
		V _R = 1 V; f = 1 MHz		0.37		
		V _R = 20 V; f = 1 MHz		0.23	0.35	
diode forward resistance	r _D	I _F = 0.5 mA; f = 100 MHz; note 1		20	40	Ω
		I _F = 1 mA; f = 100 MHz; note 1		10	20	
		I _F = 10 mA; f = 100 MHz; note 1		2	3.8	
		I _F = 100 mA; f = 100 MHz; note 1		0.7	1.35	
charge carrier life time	τ _L	when switched from I _F = 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	6Kp
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