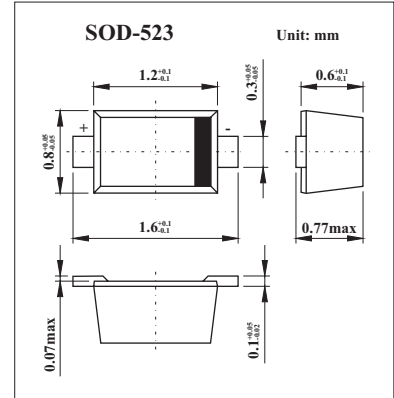


## General purpose PIN diode

## BAP51-02



### ■ Features

- Low diode capacitance
- Low diode forward resistance.

### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min	Max	Unit
continuous reverse voltage	$V_R$		50	V
continuous forward current	$I_F$		50	mA
total power dissipation $T_s = 90^\circ\text{C}$	$P_{tot}$		715	mW
storage temperature	$T_{stg}$	-65	+150	$^\circ\text{C}$
junction temperature	$T_j$	-65	+150	$^\circ\text{C}$
thermal resistance from junction to soldering point	$R_{th\ j-s}$		85	K/W

### ■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
forward voltage	$V_F$	$I_F = 50\text{ mA}$		0.95	1.1	V
reverse voltage	$V_R$	$I_R = 10\ \mu\text{A}$	50			V
reverse current	$I_R$	$V_R = 50\text{ V}$			100	nA
diode capacitance	$C_d$	$V_R = 0; f = 1\text{ MHz}$		0.4		pF
		$V_R = 1\text{ V}; f = 1\text{ MHz}$		0.3	0.55	
		$V_R = 5\text{ V}; f = 1\text{ MHz}$		0.2	0.35	
diode forward resistance	$r_D$	$I_F = 0.5\text{ mA}; f = 100\text{ MHz}; \text{note 1}$		5.5	9	$\Omega$
		$I_F = 1\text{ mA}; f = 100\text{ MHz}; \text{note 1}$		3.6	6.5	
		$I_F = 10\text{ mA}; f = 100\text{ MHz}; \text{note 1}$		1.5	2.5	

Note

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

### ■ Marking

Marking	A5
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