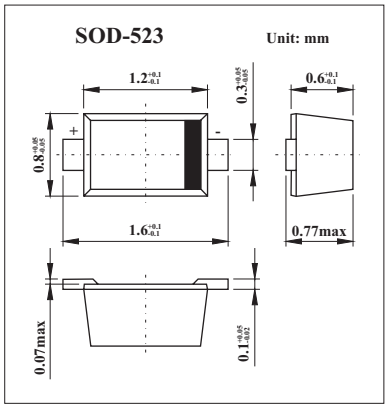
BAP63-02



■ Features

- High speed switching for RF signals
- Low diode capacitance
- Low diode forward resistance
- Very low series inductance.
- For applications up to 3 GHz.

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Min	Max	Unit
continuous reverse voltage	V_R		50	V
continuous forward current	I_F		100	mA
total power dissipation $T_S \leqslant 90$ ℃	P_{tot}		715	mW
storage temperature	T_{stg}	-65	+150	℃
junction temperature	T_j	-65	+150	℃
thermal resistance from junction to soldering point	$R_{th\ j\text{-}s}$		85	K/W

BAP63-02

■ Electrical Characteristics Ta = 25℃

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 = 35 V		10	nA
diode capacitance	C_d	V_R = 0; f = 1 MHz	0.36		pF
		V_R = 1 V; f = 1 MHz	0.32		
		V_R = 20V; f = 1 MHz	0.25	0.32	
diode forward resistance	r_D	I_F = 0.5 mA; f = 100 MHz; note 1	2.5	3.5	Ω
		I_F = 1 mA; f = 100 MHz; note 1	1.95	3	
		I_F = 10 mA; f = 100 MHz; note 1	1.17	1.8	
		I_F = 100 mA; f = 100 MHz; note 1	0.9	1.5	
isolation	$\|s21\|^2$	V_R = 0; f = 900 MHz	15.6		dB
		V_R = 0; f = 1800 MHz	10.3		
		V_R = 0; f = 2450 MHz	8.3		
insertion loss	$\|s21\|^2$	V_R = 0.5; f = 900 MHz	0.19		dB
		V_R = 0.5; f = 1800 MHz	0.24		
		V_R = 0.5; f = 2450 MHz	0.28		
insertion loss	$\|s21\|^2$	V_R = 1; f = 900 MHz	0.16		dB
		V_R = 1; f = 1800 MHz	0.20		
		V_R = 1; f = 2450 MHz	0.25		
insertion loss	$\|s21\|^2$	V_R = 10; f = 900 MHz	0.10		dB
		V_R = 10; f = 1800 MHz	0.16		
		V_R = 10; f = 2450 MHz	0.20		
insertion loss	$\|s21\|^2$	V_R = 100; f = 900 MHz	0.09		dB
		V_R = 100; f = 1800 MHz	0.14		
		V_R = 100; f = 2450 MHz	0.18		
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	310		μs
series inductance	L_S	I_F = 100 mA; f = 100 MHz	0.6		nH

Note

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

■ Marking

Marking	K5