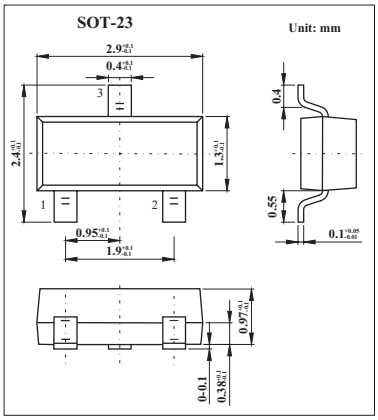
TY Semicondutor®

Product specification

BAP64-04



■ 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℃

Parameter	Symbol	Min	Max	Unit
continuous reverse voltage	V_R		175	V
continuous forward current	I_F		100	mA
total power dissipation Ts = 90 ℃	P_{tot}		250	mW
storage temperature	T_{stg}	-65	+150	℃
junction temperature	T_j	-65	+150	℃
thermal resistance from junction to soldering point	$R_{th\ j\text{-}s}$		220	K/W

■ Electrical Characteristics Ta = 25℃

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	0.5	pF
		V_R = 20 V; f = 1 MHz		0.23	0.35	pF
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	4Kp