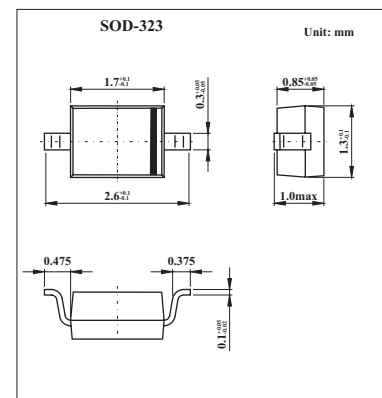


Silicon PIN Diode

BA596

■ Features

- Current-controlled RF resistor for switching and attenuating applications.
- Frequency range 1 MHz ... 2 GHz
- Frequency range above 1 MHz
- Designed for low IM distortion



■ Absolute Maximum Ratings Ta = 25 °C

Parameter	Symbol	Value	Unit
Reverse voltage	V_R	50	V
Forward current	I_F	50	mA
Operating temperature range	T_{op}	-55 to +125	°C
Storage temperature range	T_{stg}	-55 to +150	°C
Junction - ambient	R_{thJA}	≤ 450	K/W

■ Electrical Characteristics Ta = 25 °C

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_F	$I_F = 50 \text{ mA}$			1.15	V
Reverse current	I_R	$V_R = 50 \text{ V}$			50	nA
Diode capacitance	C_T	$f = 1 \text{ MHz}, V_R = 50 \text{ V}$		0.23	0.35	pF
		$f = 100 \text{ MHz}, V_R = 0 \text{ V}$		0.2		
Forward resistance	r_f	$f = 100 \text{ MHz}$				Ω
		$I_F = 10 \mu\text{A}$		2400		
		$I_F = 1 \text{ mA}$		58		
		$I_F = 10 \text{ mA}$	6.5	7.8	10	
Zero bias conductance	g_p	$f = 100 \text{ MHz}, V_R = 0 \text{ V}$		40		μS
Series inductance	L_s			2		nH

■ Marking

Marking	white P
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