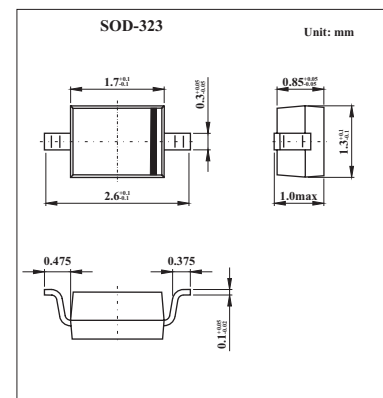


Silicon PIN Diode

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 $T_a = 25^\circ\text{C}$

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

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

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_F	$I_F = 50\text{ mA}$			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
		$I_F = 10\text{ }\mu\text{A}$		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		$\mu\text{ S}$
Series inductance	L_s			2		nH

■ Marking

Marking	white P
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