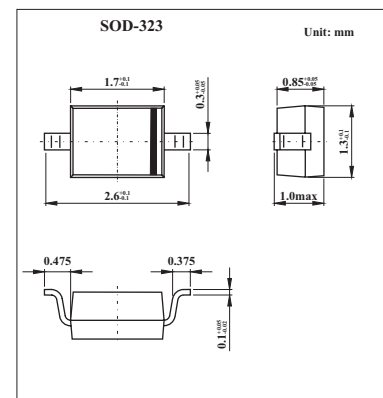


## Silicon PIN Diode

### 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	$R_{thJA}$	$\leq 450$	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	$r_f$	$f = 100\text{ MHz}$				$\Omega$
		$I_F = 10\text{ }\mu\text{A}$		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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