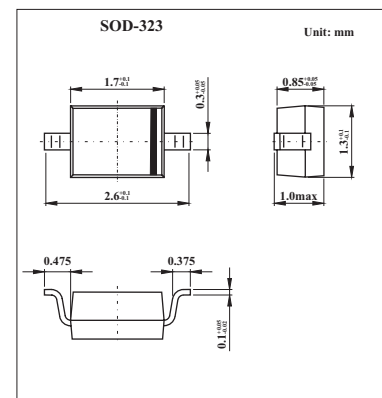


Silicon PIN Diode

BA597

■ Features

- RF switch, RF attenuator for frequencies above 10 MHz
- Very 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	100	mA
Total power dissipation $T_s \leq 40^\circ\text{C}^{1)}$	T_{tot}	250	mW
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature range	T_{stg}	-55 to +150	$^\circ\text{C}$

Note:

1. Package mounted on aluminum $15\text{ mm} \times 16.7\text{ mm} \times 0.7\text{ mm}$.

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

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current	I_R	$V_R = 30\text{ V}$			20	nA
Forward voltage	V_F	$I_F = 100\text{ mA}$		0.9		V
Diode capacitance	C_T	$V_R = 10\text{ V}, f = 1\text{ MHz}$		0.52		pF
		$V_R = 0\text{ V}, f = 100\text{ MHz}$		0.27		
Forward resistance	r_f	$I_F = 1.5\text{ mA}, f = 100\text{ MHz}$		22		Ω
		$I_F = 10\text{ mA}, f = 100\text{ MHz}$		4.2		
Charge carrier lifetime	τ_L	$I_F = 10\text{ mA}, I_R = 6\text{ mA}, I_R = 3\text{ mA}$		2.5		$\mu\text{ s}$

■ Marking

Marking	yellow R
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