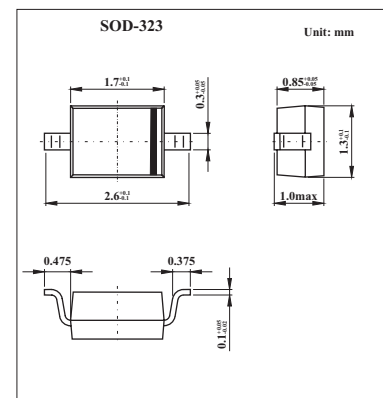


## Silicon PIN Diode

### 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		$\Omega$
		$I_F = 10\text{ mA}, f = 100\text{ MHz}$		4.2		
Charge carrier lifetime	$\tau_L$	$I_F = 10\text{ mA}, I_R = 6\text{ mA}, I_R = 3\text{ mA}$		2.5		$\mu\text{ s}$

#### ■ Marking

Marking	yellow R
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