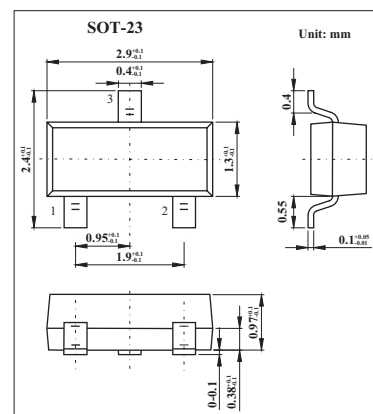


Silicon PIN Diode

BA885

■ Features

- Current-controlled RF resistor for switching and attenuating applications
- Frequency range 1 MHz. . . 2 GHz
- Especially useful as antenna switch in TV-sat tuners

■ 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 ¹⁾	R_{thJA}	≤ 450	K/W

Note:

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

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

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward Voltage	V_F	$I_F = 50\text{ mA}$			1.1	V
Reverse Current	I_R	$V_R = 30\text{ V}$			50	nA
Diode capacitance	C_T	$V_R = 10\text{ V}, f = 1\text{ MHz}$		0.28	0.6	pF
		$V_R = 0\text{ V}, f = 100\text{ MHz}$		0.23	0.4	
Forward resistance	r_f	$f = 100\text{ MHz}$				Ω
		$I_F = 1.5\text{ mA}$		22	40	
		$I_F = 10\text{ mA}$		5	7	
Zero bias conductance	g_p	$V_R = 0\text{ V}, f = 100\text{ MHz}$		70		$\mu\text{ S}$
Series inductance	L_s			2		nH

■ Marking

Marking	PA
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