

MICRO ELECTRONICS

2N5249

NPN
SILICON
TRANSISTOR

DESCRIPTION

2N5249 is NPN silicon planar transistor designed for AF small signal amplifier stages.

TO-92B



ECB

ABSOLUTE MAXIMUM RATINGS

Collector-Emitter Voltage	V _{CEO}	50V
Collector-Base Voltage	V _{CBO}	70V
Emitter-Base Voltage	V _{EBO}	5V
Collector Current	I _C	100mA
Continuous Power Dissipation	P _d	330mW
Operating & Storage Junction Temperature	T _j , T _{stg}	-55 to +150°C

ELECTRO-OPTICAL CHARACTERISTICS (T_a=25°C)

PARAMETER	SYMBOL	MIN	MAX	UNIT	CONDITIONS
Collector-Emitter Breakdown Voltage	LV _{CEO}	50		V	I _C = 1mA, I _B = 0
Collector-Base Breakdown Voltage	BV _{CBO}	70		V	I _C = 10μA, I _E = 0
Emitter-Base Breakdown Voltage	BV _{EBO}	5		V	I _E = 10μA, I _C = 0
Collector Cutoff Current	I _{CBO}		30	nA	V _{CB} = 50V, I _E = 0
Collector Cutoff Current	I _{CES}		30	nA	V _{CE} = 50V, V _{EB} = 0
Emitter Cutoff Current	I _{EBO}		50	nA	V _{EB} = 5V, I _C = 0
D.C. Current Gain	HFE	40	800		I _C = 2mA, V _{CE} = 5V
		150			I _C = 0.1mA, V _{CE} = 5V
Collector-Emitter Saturation Voltage	V _{CE(sat)}		0.125	V	I _C = 10mA, I _B = 1mA
			0.78	V	I _C = 10mA, I _B = 1mA
Base-Emitter Voltage	V _{BE}		0.9	V	I _C = 2mA, V _{CE} = 10V
Output Capacitance	C _{ob}		4	pF	V _{CB} = 10V, f = 1MHz
Noise Figure	NF		3	dB	I _C = 0.1mA, V _{CE} = 5V
					REB = 5Kohm

* Pulse test : pulse width < 300μS, duty cycle < 2%.



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