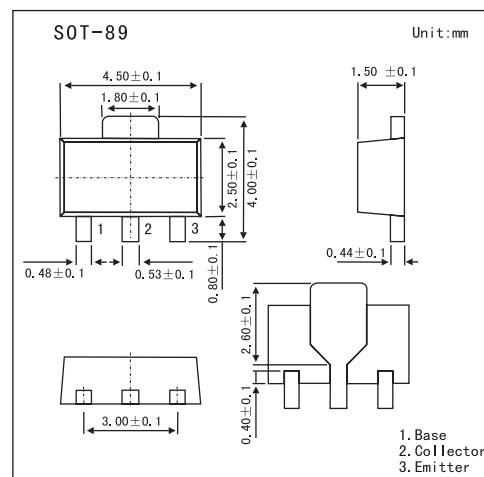


PNP Switching Transistor

PXT3906

■ Features

- High current (max. 100 mA)
- Low voltage (max. 40 V).

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	-40	V
Collector-emitter voltage	V_{CE0}	-40	V
Emitter-base voltage	V_{EB0}	-6	V
Collector current	I_C	-100	mA
Peak collector current	I_{CM}	-200	mA
Peak base current	I_{BM}	-100	mA
Total power dissipation	P_{tot} * 1 * 2 * 3	0.45 0.65 0.8	W
Storage temperature	T_{stg}	-65 to +150	$^\circ\text{C}$
Junction temperature	T_j	150	$^\circ\text{C}$
Operating ambient temperature	R_{amb}	-65 to +150	$^\circ\text{C}$
Thermal resistance from junction to ambient	$R_{th(j-a)}$ * 1 * 2 * 3	278 192 156	K/W
Thermal resistance from junction to soldering point	$R_{th(j-s)}$	80	K/W

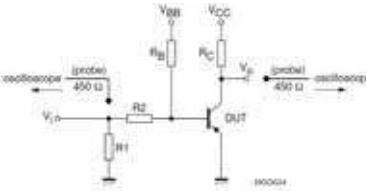
*1 Device mounted on a printed-circuit board, single-sided copper, tin-plated and standard - footprint.

*2 Device mounted on a printed-circuit board, single-sided copper, tin-plated and mounting pad for collector 1 cm^2 .

*3 Device mounted on a printed-circuit board, single-sided copper, tin-plated and mounting - pad for collector 6 cm^2 .

PXT3906

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector cutoff current	ICBO	IE = 0; VCB = -30 V			-50	nA
Emitter cutoff current	IEBO	IC = 0; VEB = -6 V			-50	nA
DC current gain	hFE	VCE = -1 V; IC = -0.1 mA	60			
		VCE = -1 V; IC = -1 mA	80			
		VCE = -1 V, IC = -10 mA	100		300	
		VCE = -1 V; IC = -50 mA	60			
		VCE = -1 V; IC = -100 mA	30			
collector-emitter saturation voltage	VCEsat	IC = -10 mA; IB = -1 mA			-250	mV
		IC = -50 mA; IB = -5 mA			-400	mV
base-emitter saturation voltage	VBEsat	IC = -10 mA; IB = -1 mA	-650		-850	mV
		IC = -50 mA; IB = -5 mA			-950	mV
Collector capacitance	Cc	IE = IE = 0; VCB = -5 V; f = 1 MHz			4.5	pF
Emitter capacitance	Ce	IC = IC = 0; VEB = -500 mV; f = 1 MHz			10	pF
Transition frequency	fT	IC = -10 mA; VCE = -20 V; f = 100 MHz	250			MHz
Noise figure	F	IC = -100 μA; VCE = -5 V; RS = 2 kΩ; f = 10 Hz to 15.7 kHz			4	dB
Turn-on time	ton	ICon = -10 mA; IBon = -1 mA; IBoff = 1 mA			65	ns
Delay time	td				35	ns
Rise time	tr				35	ns
Turn-off time	toff				300	ns
Storage time	ts				225	ns
Fall time	tf				75	ns

■ Marking

Marking	2A
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