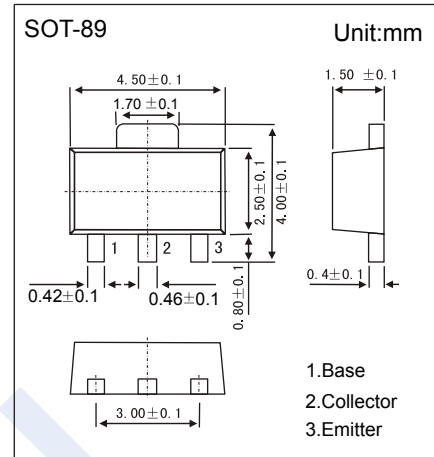


NPN Transistors

PXT3904 (KXT3904)

■ Features

- Collector Current Capability $I_c=0.2A$
- Collector Emitter Voltage $V_{CE0}=40V$
- Compliment to PXT3906

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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CB0}	60	V
Collector - Emitter Voltage	V_{CE0}	40	
Emitter - Base Voltage	V_{EB0}	6	
Collector Current - Continuous	I_c	0.2	A
Collector Power Dissipation	P_c	0.5	W
Junction Temperature	T_J	150	$^{\circ}C$
Storage Temperature Range	T_{stg}	-55 to 150	

NPN Transistors

PXT3904 (KXT3904)

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V _{CB0}	I _c = 100 μA, I _E = 0	60			V
Collector- emitter breakdown voltage	V _{CEO}	I _c = 1 mA, I _B = 0	40			
Emitter - base breakdown voltage	V _{EB0}	I _E = 100 μA, I _C = 0	6			
Collector-base cut-off current	I _{CB0}	V _{CB} = 30 V, I _E = 0			50	nA
Collector- emitter cut-off current	I _{CEx}	V _{CE} = 30 V, V _{BE(off)} = 3V			50	
Emitter cut-off current	I _{EBO}	V _{EB} = 6V, I _C =0			50	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =10 mA, I _B =1mA			0.2	V
		I _C =50 mA, I _B =5mA			0.3	
Base - emitter saturation voltage	V _{BE(sat)}	I _C =10 mA, I _B =1mA	0.65		0.85	
		I _C =50 mA, I _B =5mA			0.95	
DC current gain	h _{FE}	V _{CE} = 1V, I _C = 0.1mA	60			
		V _{CE} = 1V, I _C = 1mA	80			
		V _{CE} = 1V, I _C = 10mA	100		300	
		V _{CE} = 1V, I _C = 50mA	60			
		V _{CE} = 1V, I _C = 100mA	30			
Noise figure	NF	V _{CE} =5V, I _C =0.1mA, f=10Hz~15.7kHz, R _S =1KΩ			5	dB
Delay time	t _d	I _C =10mA, I _{B1} =-I _{B2} = 1mA			35	ns
Rise time	t _r				35	
Storage time	t _s				200	
Fall time	t _f				50	
Collector output capacitance	C _{ob}	V _{CB} = 5V, I _E = 0, f=1MHz			4	pF
Emitter capacitance	C _e	V _{EB} =0.5V, I _C =0, f=1MHz			8	
Transition frequency	f _T	V _{CE} = 20V, I _C = 10mA, f=100MHz	300			MHz

■ Marking

Marking	1A
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