

## SOT-89 Plastic-Encapsulate Transistors

### Features

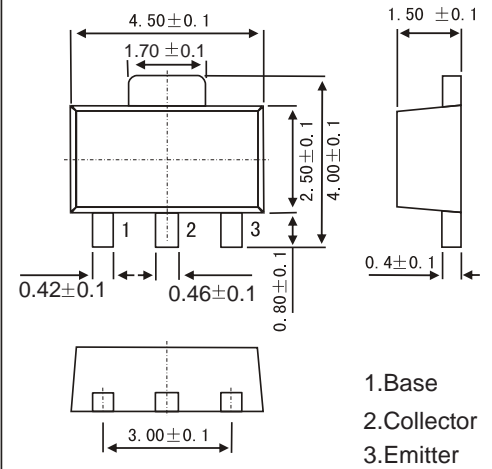
- Collector Current Capability  $I_C=0.2A$
- Collector Emitter Voltage  $V_{CEO}=40V$
- Compliment to PXT3906
- NPN Transistors

### MECHANICAL DATA

- Case style:SOT-89molded plastic
- Mounting position:any

SOT-89

Unit:mm



## MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	$V_{CB0}$	60	V
Collector - Emitter Voltage	$V_{CEO}$	40	
Emitter - Base Voltage	$V_{EBO}$	6	
Collector Current - Continuous	$I_C$	0.2	A
Collector Power Dissipation	$P_C$	0.5	W
Junction Temperature	$T_J$	150	°C
Storage Temperature Range	$T_{stg}$	-55 to 150	

### PACKAGE INFORMATION

Device	Package	Shipping
PXT3904 (KXT3904)	SOT-89	1000/Tape&Reel

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector - base breakdown voltage	$V_{CB0}$	$I_C=100 \mu A, I_E=0$	60			V
Collector - emitter breakdown voltage	$V_{CEO}$	$I_C=1 mA, I_B=0$	40			
Emitter - base breakdown voltage	$V_{EBO}$	$I_E=100 \mu A, I_C=0$	6			
Collector-base cut-off current	$I_{CBO}$	$V_{CB}=30 V, I_E=0$			50	nA
Collector - emitter cut-off current	$I_{CEX}$	$V_{CE}=30 V, V_{BE(off)}=3 V$			50	
Emitter cut-off current	$I_{EBO}$	$V_{EB}=6 V, I_C=0$			50	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=10 mA, I_B=1 mA$			0.2	V
		$I_C=50 mA, I_B=5 mA$			0.3	
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C=10 mA, I_B=1 mA$	0.65		0.85	V
		$I_C=50 mA, I_B=5 mA$			0.95	
DC current gain	$h_{FE}$	$V_{CE}=1 V, I_C=0.1 mA$	60			
		$V_{CE}=1 V, I_C=1 mA$	80			
		$V_{CE}=1 V, I_C=10 mA$	100		300	
		$V_{CE}=1 V, I_C=50 mA$	60			
		$V_{CE}=1 V, I_C=100 mA$	30			
Noise figure	NF	$V_{CE}=5 V, I_C=0.1 mA, f=10 Hz \sim 15.7 kHz, R_S=1 K\Omega$			5	dB
Delay time	$t_d$	$I_C=10 mA, I_{B1}=-I_{B2}=1 mA$			35	ns
Rise time	$t_r$				35	
Storage time	$t_s$				200	
Fall time	$t_f$				50	
Collector output capacitance	$C_{ob}$		$V_{CB}=5 V, I_E=0, f=1 MHz$			
Emitter capacitance	$C_e$	$V_{EB}=0.5 V, I_C=0, f=1 MHz$			8	
Transition frequency	$f_T$	$V_{CE}=20 V, I_C=10 mA, f=100 MHz$	300			MHz

### Marking

Marking	1A
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