

SOT-89 Plastic-Encapsulate Transistors

Features

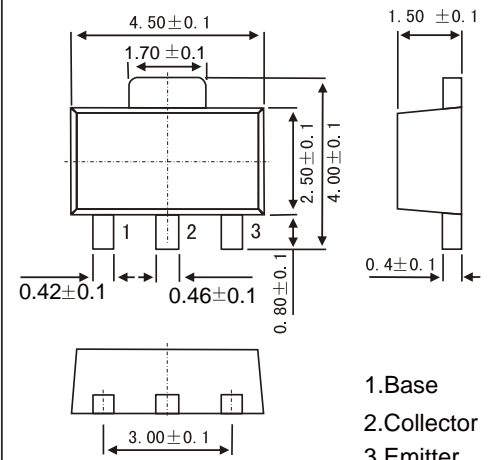
- Collector Current Capability $I_C=0.2A$
- Collector Emitter Voltage $V_{CEO}=40V$
- Compliment to PXT3906
- NPN Transistors

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	

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}	$V_{CE} = 30 V, V_{BE(off)} = 3V$			50	
Emitter cut-off current	I_{EBO}	$V_{EB} = 6V, I_C = 0$			50	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 10 mA, I_B = 1mA$ $I_C = 50 mA, I_B = 5mA$			0.2 0.3	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = 10 mA, I_B = 1mA$ $I_C = 50 mA, I_B = 5mA$	0.65		0.85 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	$V_{CE} = 5V, I_C = 0.1mA, f = 10Hz \sim 15.7kHz, R_S = 1K\Omega$			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}		$V_{CB} = 5V, I_E = 0, f = 1MHz$			
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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