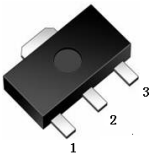
CXT5551 (NPN)

FEATURES

- Switching and amplification in high voltage Applications such as telephony
- Low current(max. 600mA)
- High voltage(max.180v)

Marking: 5551



1. BASE
2. COLLECTO
3. EMITTER

SOT-89

Maximum Ratings (Ta=25 ℃ unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	180	V
Collector-Emitter Voltage	V_{CEO}	160	V
Emitter-Base Voltage	V_{EBO}	6	V
Collector Current -Continuous	I_C	600	mA
Collector Power dissipation	PC	500	mW
Junction Temperature	T_J	150	℃
Storage Temperature	Tstg	-55to +150	℃

ELECTRICAL CHARACTERISTICS (@ Ta=25 ℃ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=100μ A,I_E=0	180			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=1mA,I_B=0	160			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=10 μ A,I_C=0	6			V
Collector cut-off current	I_{CBO}	V_{CB}=120V,I_E=0			50	nA
Emitter cut-off current	I_{EBO}	V_{EB}=4V,I_C=0			50	nA
DC current gain	$h_{FE(1)}$	V_{CE}=5V,I_C=1mA	80			
	$h_{FE(2)}$	V_{CE}=5V,I_C=10mA	80		300	
	$h_{FE(3)}$	V_{CE}=5V,I_C=50mA	30			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=10mA,I_B=1mA			0.15	V
	$V_{CE(sat)}$	I_C=50mA,I_B=5mA			0.2	V
Base-emitter voltage	$V_{BE(sat)}$	I_C=10mA,I_B=1mA			1	V
	$V_{BE(sat)}$	I_C=50mA,I_B=5mA			1	V
Transition frequency	f_T	V_{CE}=10V,I_C=10mA,f=100MHz	100			MHz
Collector output capacitance	C_{ob}	V_{CB}=10V,I_E=0,f=1MHz			6	pF
Noise figure	NF	V_{CE}=5V,I_c=0.2mA,			8	dB

CXT5551 Typical Characteristics