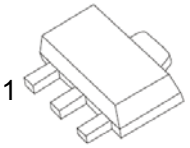
JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

SOT-89-3L Plastic-Encapsulate Transistors

CXT5551 TRANSISTOR (NPN)

SOT-89-3L



1. BASE
2. COLLECTOR
3. EMITTER

FEATURES

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

Marking: 1G6

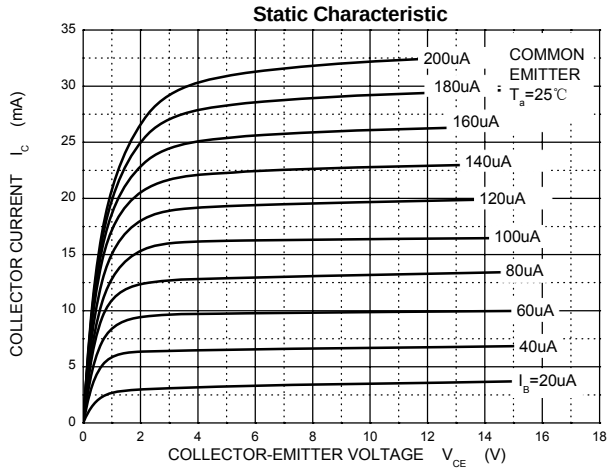
MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

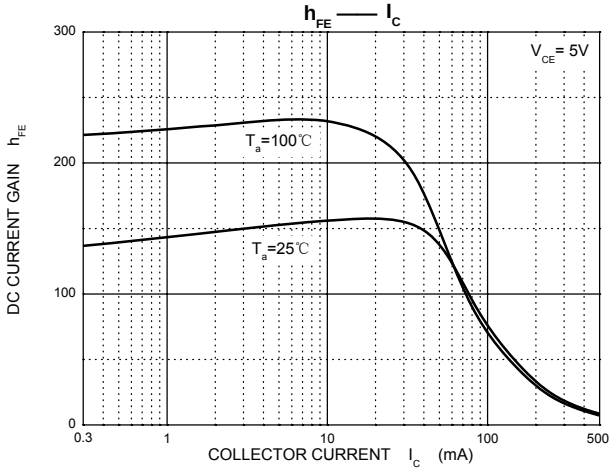
Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	180	V
V_{CEO}	Collector-Emitter Voltage	160	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current -Continuous	0.6	A
P_C	Collector Power Dissipation	0.5	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-65~150	℃

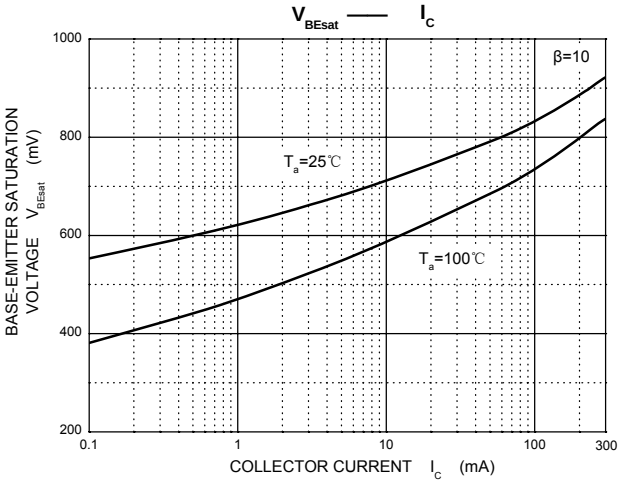
ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

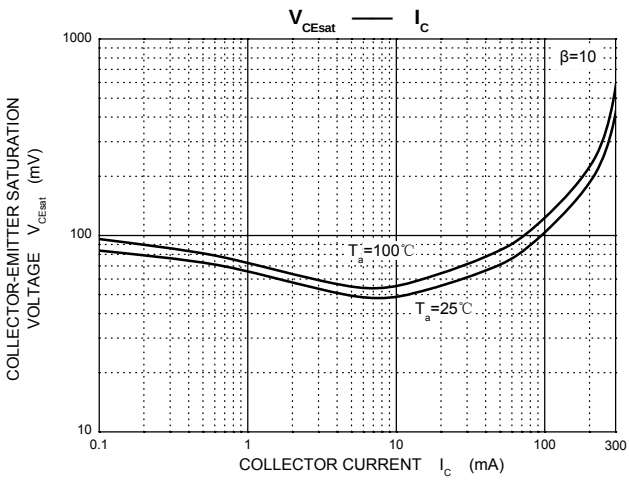
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=100μ A,I_E=0	180			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=1mA,I_B=0	160			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=10 μ A,I_C=0	6			V
Collector cut-off current	I_{CBO}	V_{CB}=120V,I_E=0			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, f=10Hzto15.7KHZ,Rs=10Ω			8	dB

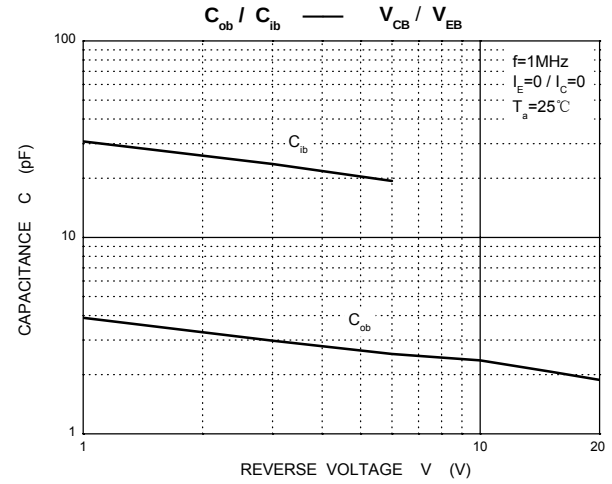
Typical Characteristics CXT5551

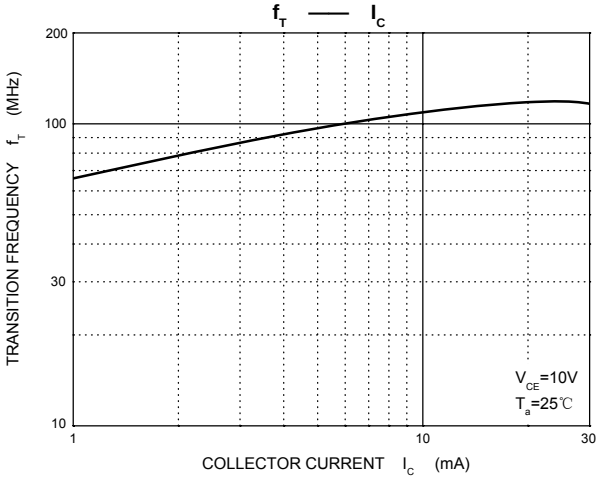


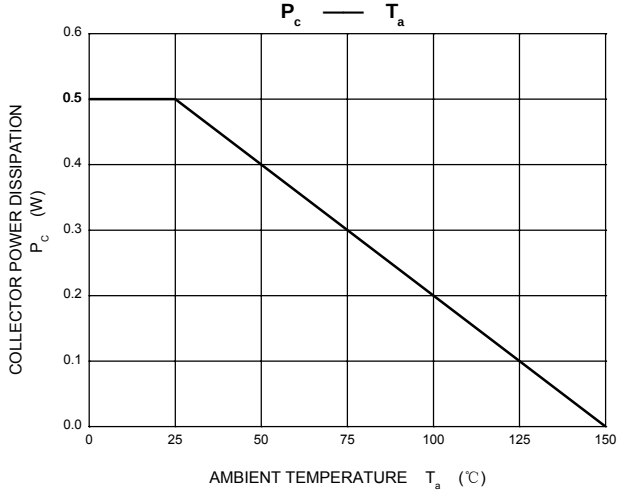












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