

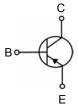
### **Features**

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

## **Package Marking and Ordering Information**

Product ID	Pack	Marking	Qty(PCS)
HCXT5551	SOT-89	1G6	1000





## Maxmim Ratings (Ta=25 unless otherwise noted)

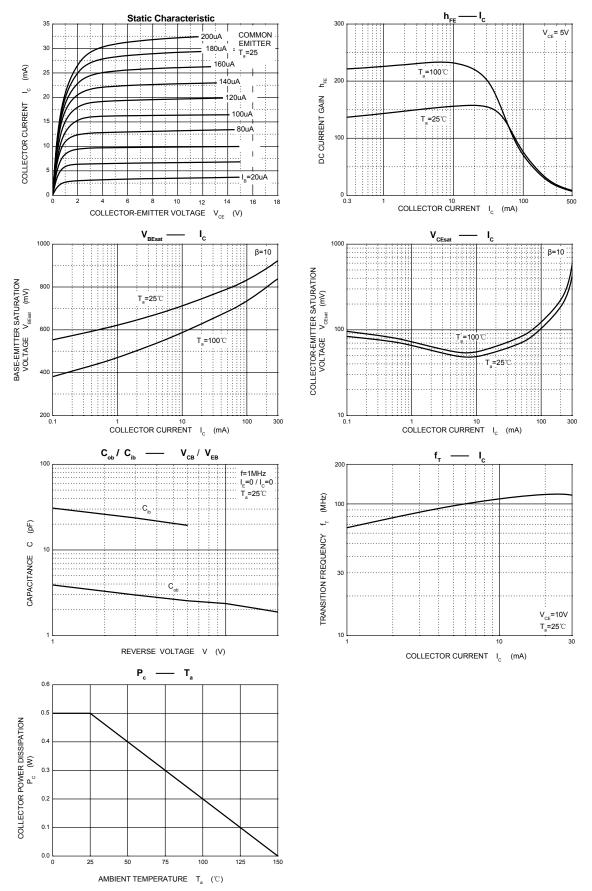
Symbol	Parameter	Value	Unit
V <sub>CBO</sub>	Collector-Base Voltage	180	V
V <sub>CEO</sub>	Collector-Emitter Voltage	160	V
V <sub>EBO</sub>	Emitter-Base Voltage	6	V
Ic	Collector Current -Continuous	0.6	Α
Pc	Collector Power Dissipation	0.5	W
T <sub>J</sub> ,T <sub>stg</sub>	Operation Junction and Storage Temperature Range	-55~150	℃

### Electrcal Charcteristics (Ta=25 unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Тур	Max	Unit
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> =100μ A,I <sub>E</sub> =0	180			V
Collector-emitter breakdown voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> =1mA,I <sub>B</sub> =0	160			V
Emitter-base breakdown voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> =10 μ A,I <sub>C</sub> =0	6			V
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> =120V,I <sub>E</sub> =0			50	nA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> =4V,I <sub>C</sub> =0			50	nA
	h <sub>FE(1)</sub>	V <sub>CE</sub> =5V,I <sub>C</sub> =1mA	80			
DC current gain	h <sub>FE(2)</sub>	V <sub>CE</sub> =5V,I <sub>C</sub> =10mA	100		300	300
	h <sub>FE(3)</sub>	V <sub>CE</sub> =5V,I <sub>C</sub> =50mA	30			
Collector emitter caturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =10mA,I <sub>B</sub> =1mA			0.15	٧
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =50mA,I <sub>B</sub> =5mA			0.2	٧
Deep emitter veltere	V <sub>BE(sat)</sub>	I <sub>C</sub> =10mA,I <sub>B</sub> =1mA			1	٧
Base-emitter voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> =50mA,I <sub>B</sub> =5mA			1	V
Transition frequency	f⊤	V <sub>CE</sub> =10V,I <sub>C</sub> =10mA,f=100MHz	100			MHz
Collector output capacitance	C <sub>ob</sub>	V <sub>CB</sub> =10V,I <sub>E</sub> =0,f=1MHz			6	pF
Noise figure	NF	V <sub>CE</sub> =5V,I <sub>c</sub> =0.2mA,			8	dB
Noise ligure	IVI	f=10Hzto15.7KHZ,Rs=10Ω				

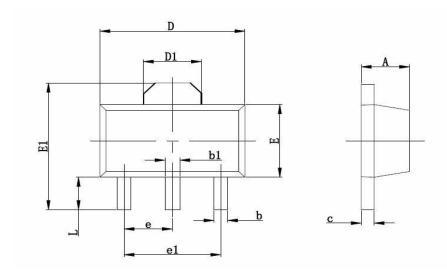


# **Typical Characteristics**





## **SOT-89 Package Outline Dimensions**



Symbol	Dimensions In Millimeters		Dimensions In Inches		
	Min	Max	Min	Max	
Α	1.400	1.600	0.055	0.063	
b	0.320	0.520	0.013	0.020	
b1	0.400	0.580	0.016	0.023	
С	0.350	0.440	0.014	0.017	
D	4.400	4.600	0.173	0.181	
D1	1.550 REF.		0.061 REF.		
E	2.300	2.600	0.091	0.102	
E1	3.940	4.250	0.155	0.167	
е	1.500 TYP.		0.060 TYP.		
e1	3.000 TYP.		0.118 TYP.		
L	0.900	1.200	0.035	0.047	



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