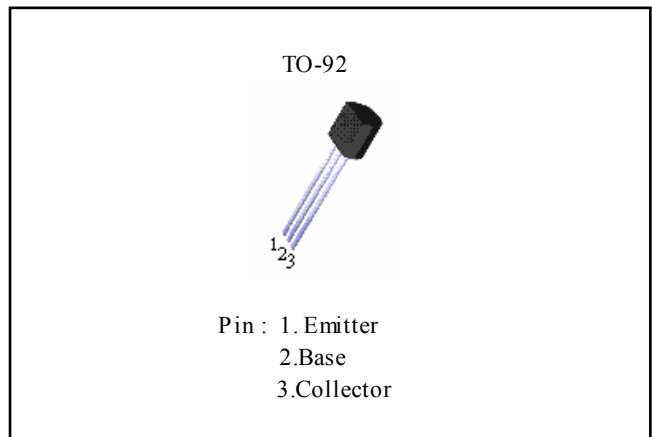


NPN Epitaxial Silicon Transistors

AMPLIFIER TRANSISTOR

- Collector-Base Voltage: $V_{CE0}=160V$
- Collector Dissipation $P_c=0.625W(T_c=25^{\circ}C)$



ABSOLUTE MAXIMUM RATINGS ($T_a = 25^{\circ}C$)

Characteristic	Symbol	Rating	Unit
Collector-base Voltage	V_{CBO}	180	V
Collector-Emitter Voltage	V_{CEO}	160	V
Emitter-base Voltage	V_{EBO}	5	V
Collector Current (DC)	I_C	0.6	A
* Collector Dissipation	P_C	0.625	W
Junction Temperature	T_J	150	$^{\circ}C$
Storage Temperature	T_{stg}	-55~150	$^{\circ}C$

ORDERING INFORMATION

Device	Operating Temperature	Package
PJ2N5551CT	-20 $^{\circ}C$ ~ +85 $^{\circ}C$	TO-92

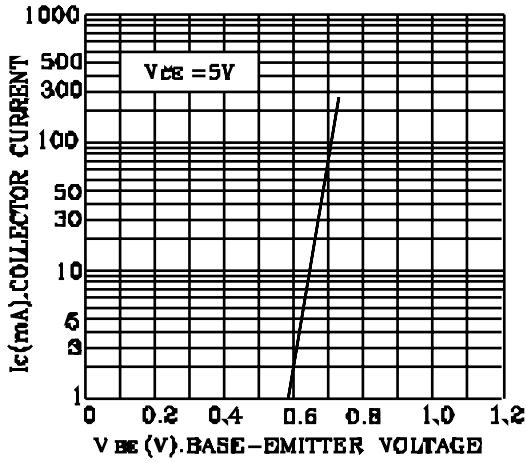
ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}C$)

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	$I_c=100 \mu A, I_E=0$	180			V
Collector- Emitter Breakdown Voltage	BV_{CEO}	$I_c=1mA, I_B=0$	160			V
Emitter-Base Breakdown Voltage	BV_{EBO}	$I_E=10 \mu A, I_C=0$	6			V
Collector Cutoff Current	I_{CBO}	$V_{CB}=120V, I_E=0$			50	nA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=4V, I_c=0$			50	nA
DC Current Gain	H_{EF1}	$V_{CE}=5V, I_C=1 mA$	80			
	H_{EF2}	$V_{CE}=5V, I_C=10mA$	80			
	H_{EF3}	$V_{CE}=5V, I_C=50mA$	30			
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_c=10 mA, I_B=1 mA$			0.15	V
		$I_c=50 mA, I_B=5 mA$			0.2	V
Base-Emitter Saturation Voltage	$V_{BE(SAT)}$	$I_c=10 mA, I_B=1 mA$			1	V
		$I_c=50 mA, I_B=5 mA$			1	V
Output Capacitance	C_{ob}	$V_{CB}=20V, I_E=0, f=1MHz$			6	PF
Current Gain-Bandwidth product	f_T	$V_{CE}=10V, I_c=10Ma, f=100 MHz$	100		300	MHz
Noise Figure	NF	$V_{CE}=5V, I_C=250 \mu A$ $R_S=1K \Omega, f=10Hz$ to 15.7KHz			8	dB

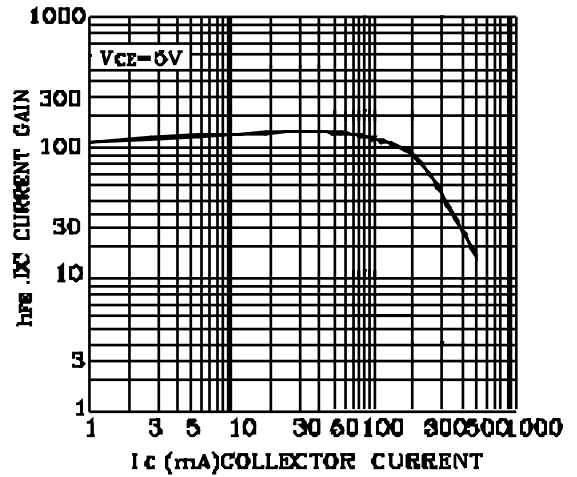
- Pulse Test: Pulse Width $\leq 300 \mu s$, Duty Cycle $\leq 2\%$.

NPN Epitaxial Silicon Transistors

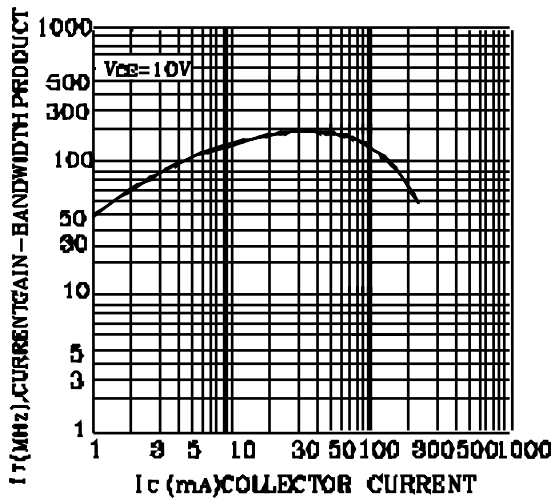
DC CURRENT GAIN



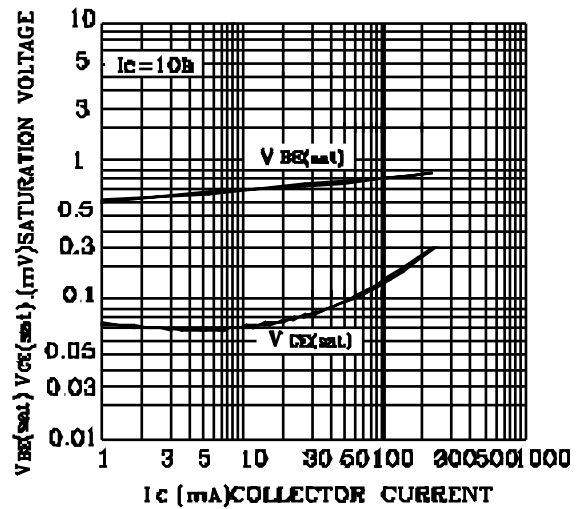
BASE-EMITTER ON VOLTAGE



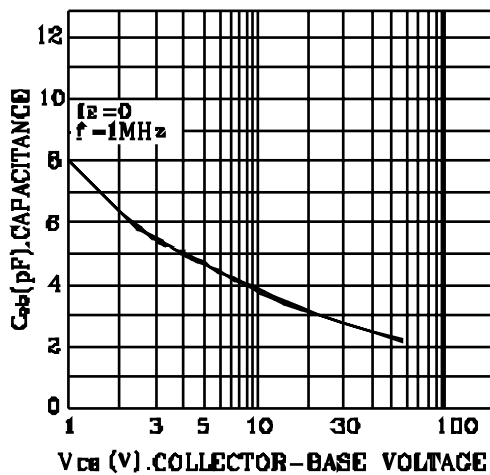
CURRENT GAIN-BANDWIDTH PRODUCT



BASE-EMITTER SATURATION VOLTAGE
COLLECTOR-EMITTER SATURATION VOLTAGE



OUTPUT CAPACITANCE



TO-92 Unit:mm

