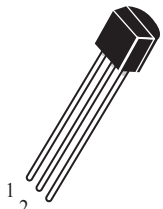
WEITRON

2N5551

NPN Transistors

Lead(Pb)-Free

TO-92



1. EMITTER
2. BASE
3. COLLECTOR

ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Rating	Symbol	2N5551	Unit
Collector-Emitter Voltage	V_{CEO}	160	Vdc
Collector-Base Voltage	V_{CBO}	180	Vdc
Emitter-Base VOltage	V_{EBO}	6.0	Vdc
Collector Current	I_C	600	mAdc
Total Device Dissipation T_A=25°C	P_D	0.625	W
Junction Temperature	T_j	150	°C
Storage, Temperature	Tstg	-55 to +150	°C

ELECTRICAL CHARACTERISTICS

Characteristics	Symbol	Min	Max	Unit
Collector-Emitter Breakdown Voltage (I_C= 1.0 mAdc, I_B=0)	$V_{(BR)CEO}$	160	-	Vdc
Collector-Base Breakdown Voltage (I_C= 100 uAdc, I_E=0)	$V_{(BR)CBO}$	180	-	Vdc
Emitter-Base Breakdown Voltage (I_E= 10 uAdc, I_C=0)	$V_{(BR)EBO}$	6.0	-	Vdc
Collector Cutoff Current (V_{CB}=120 Vdc, I_E=0)	I_{CBO}	-	0.05	uAdc
Emitter Cutoff Current (V_{EB}= 4.0 Vdc, I_C=0)	I_{EBO}	-	0.05	uAdc

ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted) (Countinued)

Characteristics	Symbol	Min	TYP	Max	Unit
ON CHARACTERISTICS					
DC Current Gain (I_C=1.0 mAdc, V_{CE}=5.0 Vdc)	h_{FE} (1)	80	-	-	-
DC Current Gain (I_C=10 mAdc, V_{CE}= 5.0 Vdc)	h_{FE} (2)	80	-	250	-
(I_C =50 mAdc, V_{CE} =5.0 Vdc)	h_{FE} (3)	50	-	-	-
Collector-Emitter Saturation Voltage (I_C= 50 mAdc, I_B= 5.0 mAdc)	$V_{CE(sat)}$	-	-	0.5	Vdc
Base-Emitter Saturation Voltage (I_C= 50 mAdc, I_B= 5.0 mAdc)	$V_{BE(sat)}$	-	-	1.0	Vdc
Current-Gain-Bandwidth Product (I_C= 10 mAdc, V_{CE}=5.0 Vdc, f=30MHz)	f_T	100	-	-	MHz

Classification of $h_{FE(1)}$

Rank	A	B	C
Range	80-160	120-180	150-250

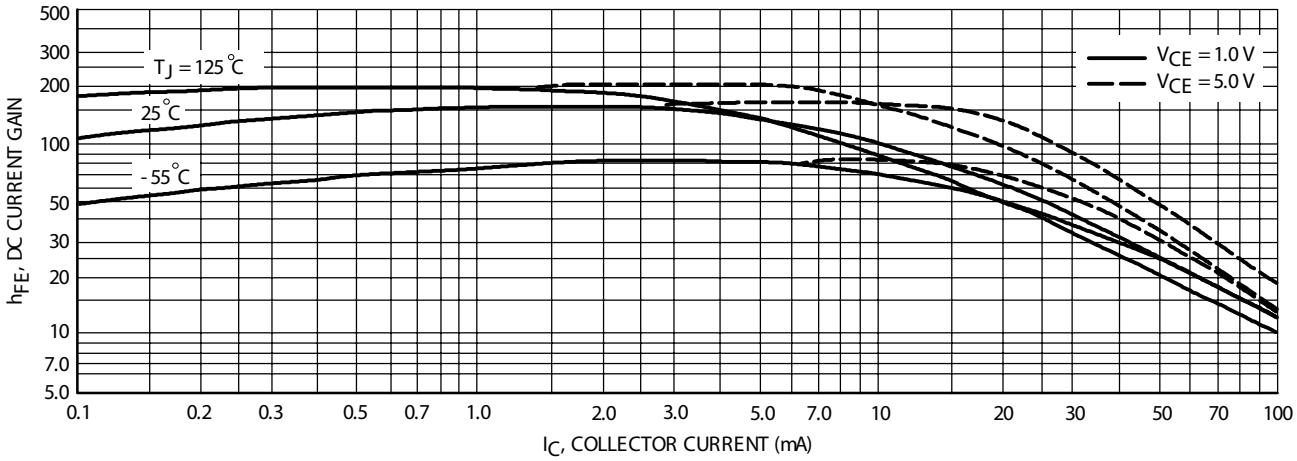


FIG1. DC Current Gain

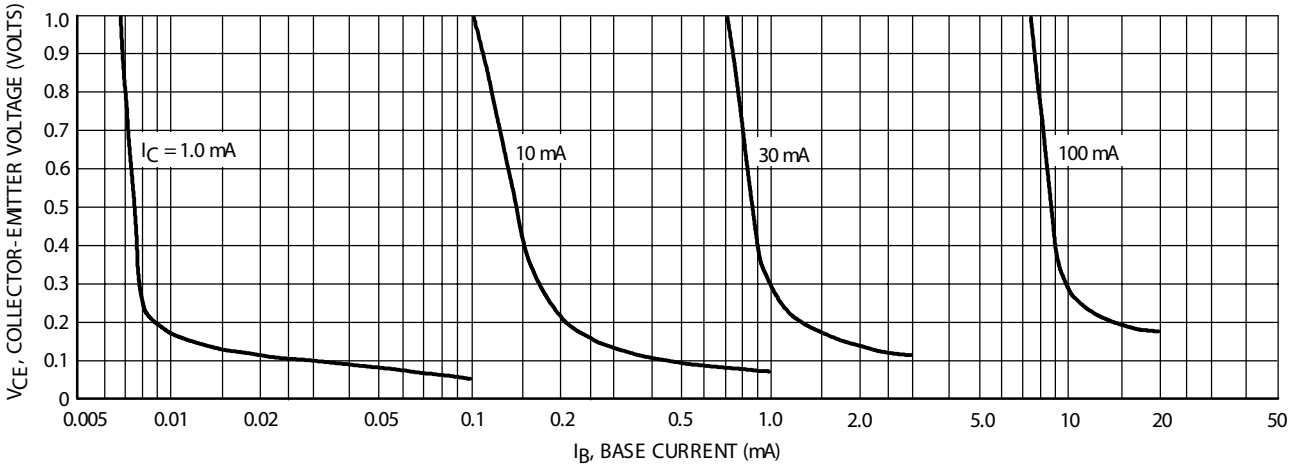
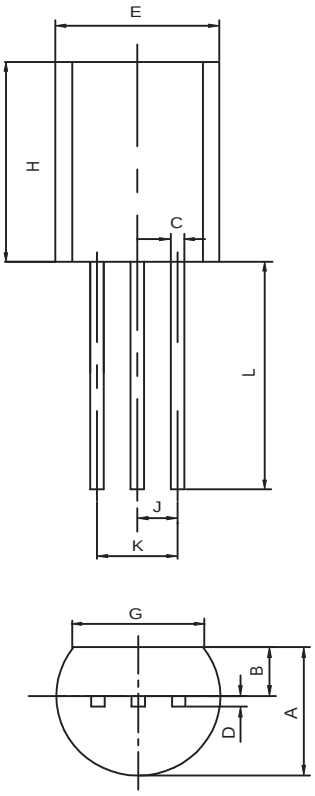


FIG 2. Collector Saturation Region

TO-92 Outline Dimensions

unit:mm



TO-92		
Dim	**Min**	**Max**
A	3.30	3.70
B	1.10	1.40
C	0.38	0.55
D	0.36	0.51
E	4.40	4.70
G	3.43	-
H	4.30	4.70
J	1.270TYP	
K	2.44	2.64
L	14.10	14.50