Elektronische Bauelemente

2N5550

0.6 A, 160 V

NPN Plastic Encapsulated Transistor

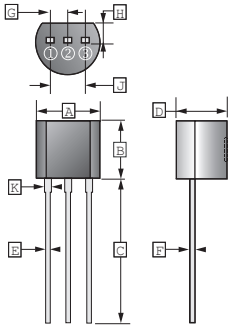
RoHS Compliant Product

A suffix of "-C" specifies halogen & lead-free

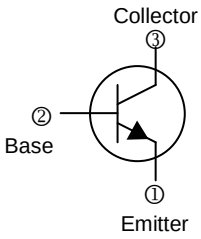
FEATURES

- Switching and amplification in high voltage
- Applications such as telephony
- Low current(max.600mA)
- High voltage(max.160V)

TO-92



REF.	Millimeter	
	Min.	Max.
A	4.40	4.70
B	4.30	4.70
C	12.70	-
D	3.30	3.81
E	0.36	0.56
F	0.36	0.51
G	1.27 TYP.	
H	1.10	-
J	2.42	2.66
K	0.36	0.76



ABSOLUTE MAXIMUM RATINGS (T_A = 25℃ unless otherwise specified)

PARAMETER	SYMBOL	RATING	UNIT
Collector to Base Voltage	V_{CBO}	160	V
Collector to Emitter Voltage	V_{CEO}	140	V
Emitter to Base Voltage	V_{EBO}	6	V
Collector Current - Continuous	I_C	0.6	A
Collector Power Dissipation	P_C	0.625	W
Junction, Storage Temperature	T_J, T_{STG}	150, -55~150	℃

ELECTRICAL CHARACTERISTICS (T_A = 25℃ unless otherwise specified)

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITION
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	160	-	-	V	I_C=100μA, I_E = 0A
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	140	-	-	V	I_C=1mA, I_B = 0A
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	6	-	-	V	I_E=10μA, I_C = 0A
Collector Cut-Off Current	I_{CBO}	-	-	0.1	μA	V_{CB}=100V, I_E = 0 A
Emitter Cut-Off Current	I_{EBO}	-	-	0.05	μA	V_{EB}=4 V, I_C =0 mA
DC Current Gain	h_{FE1}	60	-	-		V_{CE}=5V, I_C=1mA
	h_{FE2}	60	-	250		V_{CE}=5V, I_C=10mA
	h_{FE3}	20	-	-		V_{CE}=5V, I_C=50mA
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	0.15	V	I_C=10mA, I_B=1mA
		-	-	0.25	V	I_C=50mA, I_B=5mA
Base to Emitter Voltage	$V_{BE(sat)}$	-	-	1	V	I_C=10mA, I_B=1mA
		-	-	1.2	V	I_C=50mA, I_B=5mA
Collector Output Capacitance	C_{ob}	-	-	6	pF	V_{CB} = 10V, I_E = 0A, f=1MHz
Transition Frequency	f_T	100	-	300	MHz	V_{CE} = 10V, I_C = 10mA, f=100MHz
Noise Figure	NF	-	-	10	dB	V_{CE} =5V, I_C = 0.25mA, f=1KHz, R_S=1kΩ

CHARACTERISTIC CURVES

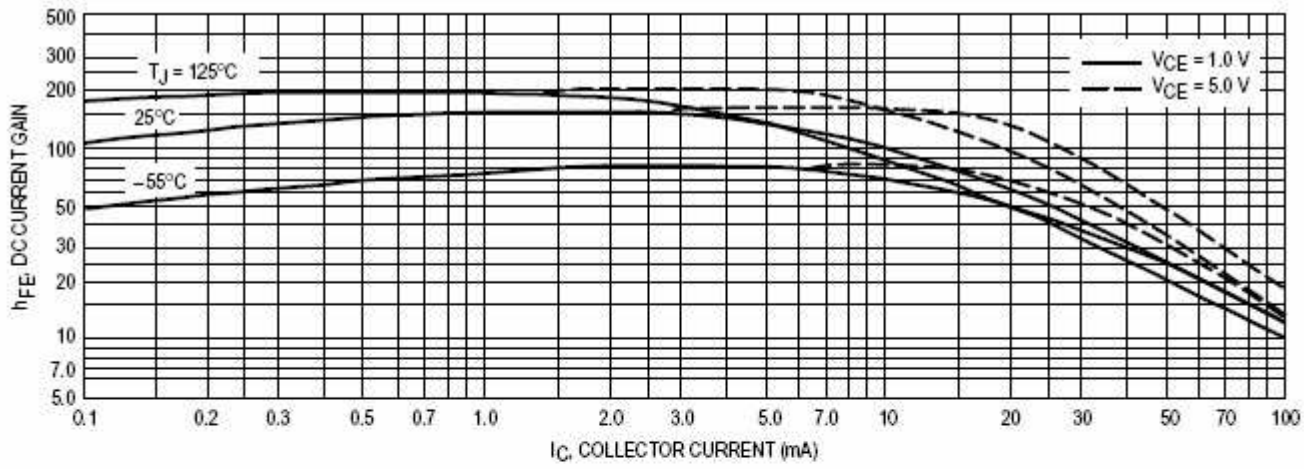


Figure 1. DC Current Gain