Elektronische Bauelemente

D965

NPN General Purpose Transistor

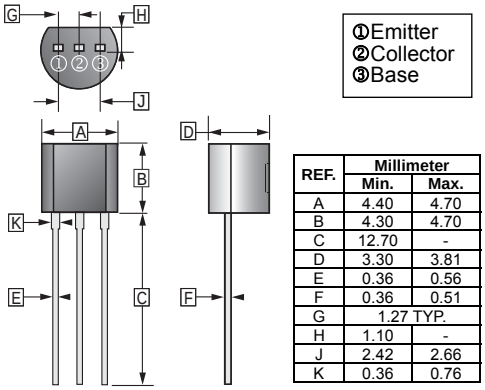
RoHS Compliant Product

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

FEATURES

- Audio amplifier
- Flash unit of camera
- Switching circuit

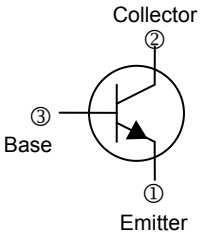
TO-92



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

CLASSIFICATION OF $h_{FE(2)}$

Rank	R	T	V
Range	340 - 600	560 - 950	900 - 2000



ABSOLUTE MAXIMUM RATINGS (T_a = 25°C unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Collector - Base Voltage	V_{CBO}	42	V
Collector - Emitter Voltage	V_{CEO}	22	V
Emitter - Base Voltage	V_{EBO}	6	V
Collector Current -Continuous	I_C	5	A
Cpllector Power Dissipation	P_C	750	mW
Junction, Storage Temperature	T_J, T_{STG}	+150, -55 ~ +150	°C

ELECTRICAL CHARACTERISTICS (T_a = 25°C unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector - Base Breakdown Voltage	$V_{(BR)CBO}$	42	-	-	V	I_C = 0.1mA, I_E = 0
Collector - Emitter Breakdown Voltage	$V_{(BR)CEO}$	22	-	-	V	I_C = 1 mA, I_B = 0
Emitter - Base Breakdown Voltage	$V_{(BR)EBO}$	6	-	-	V	I_E = 10 μA, I_C = 0
Collector Cut - Off Current	I_{CBO}	-	-	0.1	μA	V_{CB} = 30V, I_E = 0
Emitter Cut - Off Current	I_{EBO}	-	-	0.1	μA	V_{EB} = 6V, I_C = 0
DC Current Gain	$h_{FE(1)}$	150	-	-		V_{CE} = 2V, I_C = 0.15 mA
	$h_{FE(2)}$	340	-	2000		V_{CE} = 2V, I_C = 500 mA
	$h_{FE(3)}$	150	-	-		V_{CE} = 2V, I_C = 2A
Collector - Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	0.35	V	I_C = 3000mA, I_B = 100 mA
Transition Frequency	f_T	-	150	-	MHz	V_{CE} = 6V, I_C = 50 mA, f = 30MHz

CHARACTERISTIC CURVES

Fig.1 Static characteristics

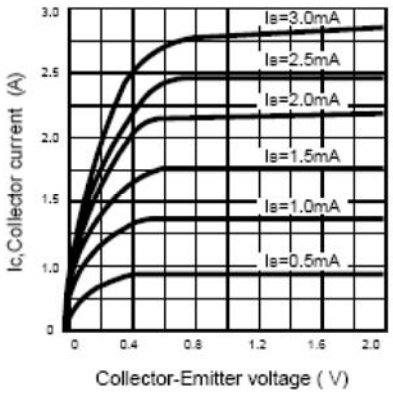


Fig.2 DC current Gain

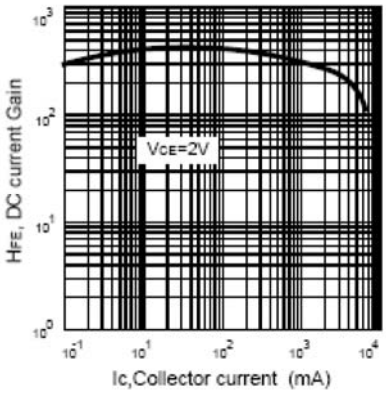


Fig.3 Base-Emitter on Voltage

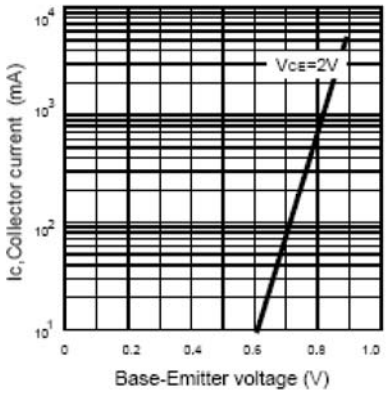


Fig.4 Saturation voltage

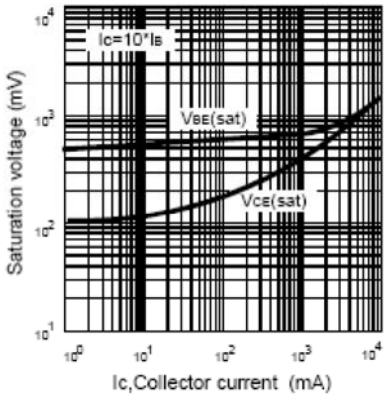


Fig.5 Current gain-bandwidth product

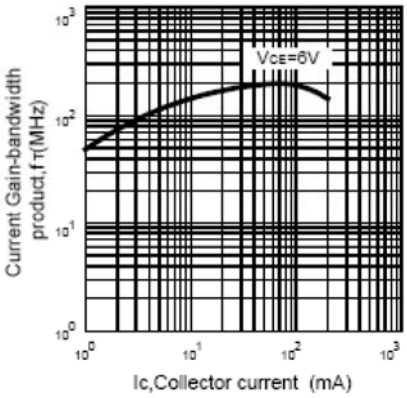


Fig.6 Collector output Capacitance

