Elektronische Bauelemente

2SC388

0.05A , 30V

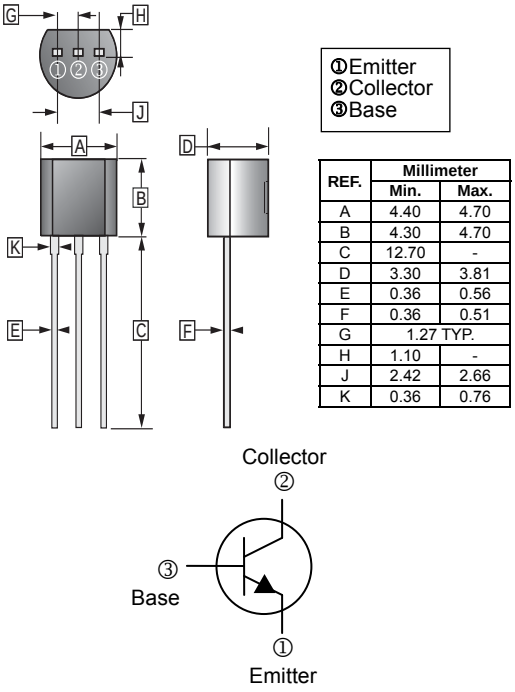
NPN Plastic-Encapsulated Transistor

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- TV Final picture if amplifier applications

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°C unless otherwise specified)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	30	V
Collector to Emitter Voltage	V_{CEO}	25	V
Emitter to Base Voltage	V_{EBO}	4	V
Collector Current - Continuous	I_C	50	mA
Collector Power Dissipation	P_C	300	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 Condition
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	30	-	-	V	I_C=10μA, I_E=0
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	25	-	-	V	I_C=5mA, I_B=0
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	4	-	-	V	I_E=10μA, 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}=3V, I_C=0
DC Current Gain	h_{FE}	20	-	200		V_{CE}=12.5V, I_C=12.5mA
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	0.2	V	I_C=15mA, I_B=1.5mA
Base to Emitter Saturation voltage	$V_{BE(sat)}$	-	-	1.2	V	I_C=15mA, I_B=1.5mA
Transition Frequency	f_T	300	-	-	MHz	V_{CE}=12.5V, I_C=12.5mA
Collector Output Capacitance	C_{ob}	0.8	-	2	pF	V_{CB}=10V, I_E=0, f=1MHz
Power Gain	Gpe	28	-	36	dB	V_{CC}=12.5V, I_E=-12.5mA, f=45MHz

Elektronische Bauelemente

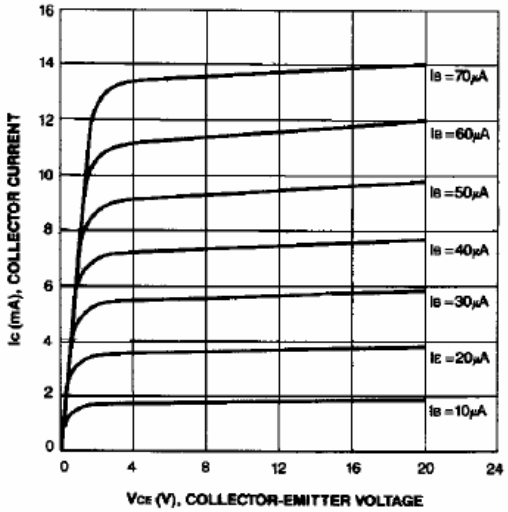
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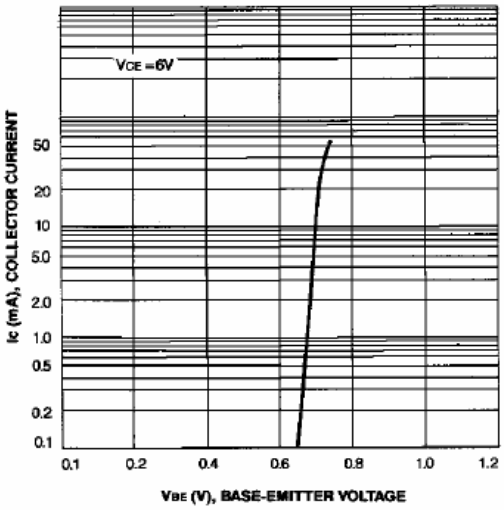
NPN Plastic-Encapsulated Transistor

CHARACTERISTIC CURVES

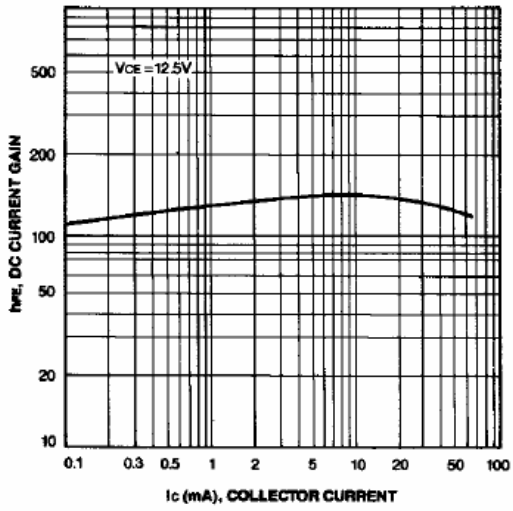
STATIC CHARACTERISTIC



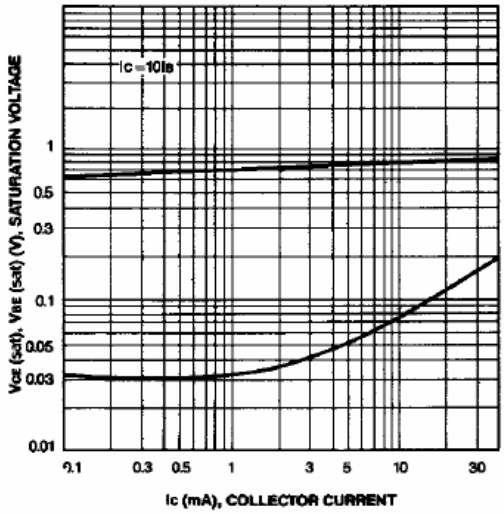
BASE-EMITTER ON VOLTAGE



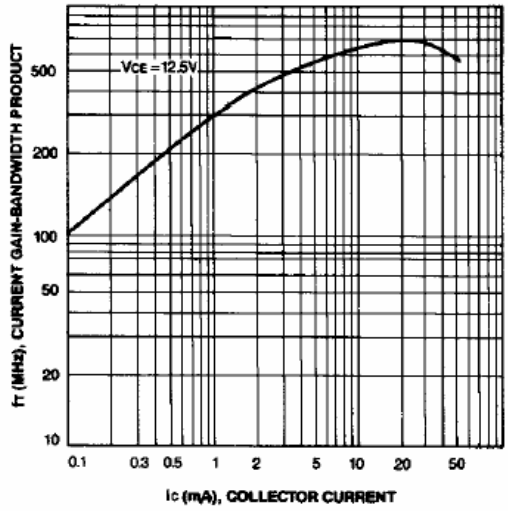
DC CURRENT GAIN



BASE-EMITTER SATURATION VOLTAGE
COLLECTOR-EMITTER SATURATION VOLTAGE



CURRENT GAIN-BANDWIDTH PRODUCT



COLLECTOR INPUT CAPACITANCE
COLLECTOR OUTPUT CAPACITANCE

