

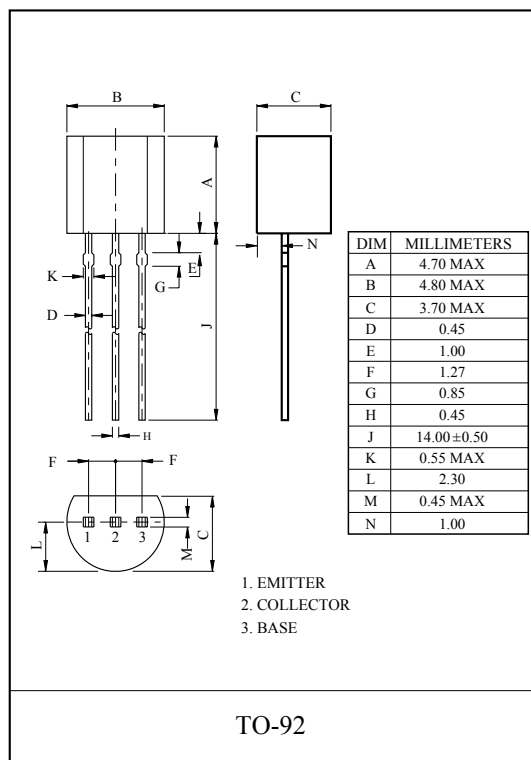
DIFFERENTIAL AMP. APPLICATION.

FEATURES

- Matched Pairs for Differential Amplifiers.
- High Breakdown Voltage : $V_{CEO} = -120V(\text{Min.})$.
- Low Noise : $NF = 1\text{dB}(\text{Typ.})$, $10\text{dB}(\text{Max.})$.
- Complementary to KTC3400.

MAXIMUM RATING ($T_a = 25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	-120	V
Collector-Emitter Voltage	V_{CEO}	-120	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-100	mA
Emitter Current	I_E	100	mA
Collector Power Dissipation	P_C	625	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 ~ 150	$^\circ\text{C}$



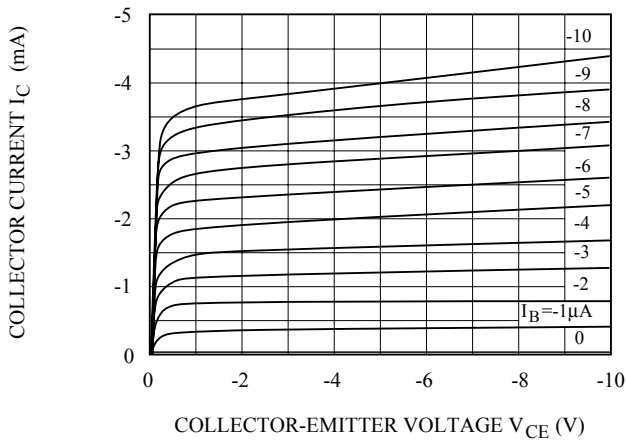
ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = -120V$, $I_E = 0$	-	-	-100	nA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = -5V$, $I_C = 0$	-	-	-100	nA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -1\text{mA}$, $I_B = 0$	-120	-	-	V
DC Current Gain	$h_{FE}(\text{Note})$	$V_{CE} = -6V$, $I_C = -2\text{mA}$	200	-	400	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -10\text{mA}$, $I_B = -1\text{mA}$	-	-	-0.3	V
Transition Frequency	f_T	$V_{CE} = -6V$, $I_C = -1\text{mA}$	-	100	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = -10V$, $I_E = 0$, $f = 1\text{MHz}$	-	4.0	-	pF
Noise Figure	NF	$V_{CE} = -6V$, $I_C = -0.1\text{mA}$, $f = 1\text{kHz}$, $R_g = 10k\Omega$	-	1.0	10	dB

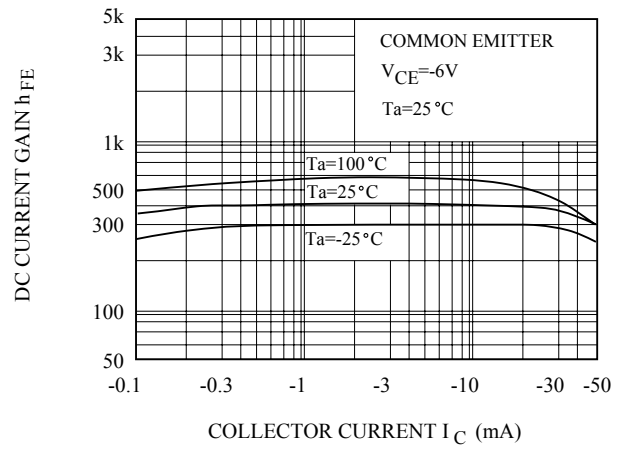
Note : h_{FE} Classification G□: 200 ~ 400, In case of G□, □: A to G, GR: 200~400

h_{FE} Classification	h_{FE}	h_{FE} Classification	h_{FE}
GA	200 ~ 220	GE	310 ~ 340
GB	220 ~ 250	GF	340 ~ 370
GC	250 ~ 280	GG	370 ~ 400
GD	280 ~ 310		

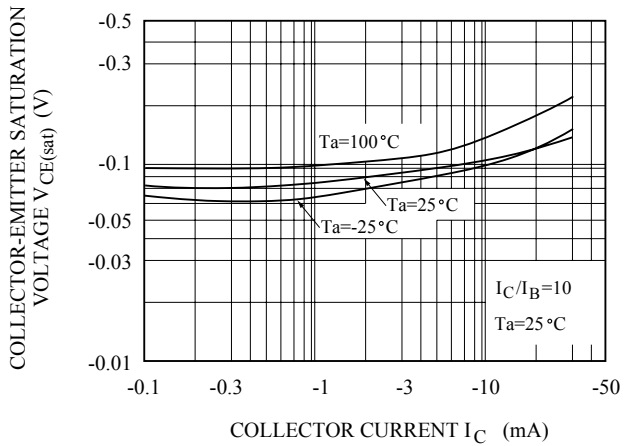
$I_C - V_{CE}$
(LOW CURRENT AND,
LOW VOLTAGE REGION)



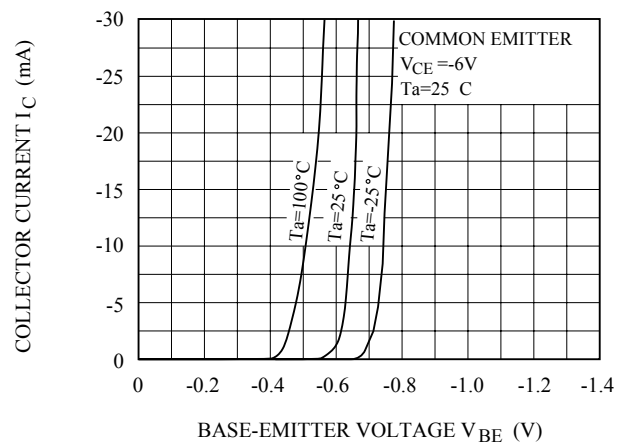
$h_{FE} - I_C$



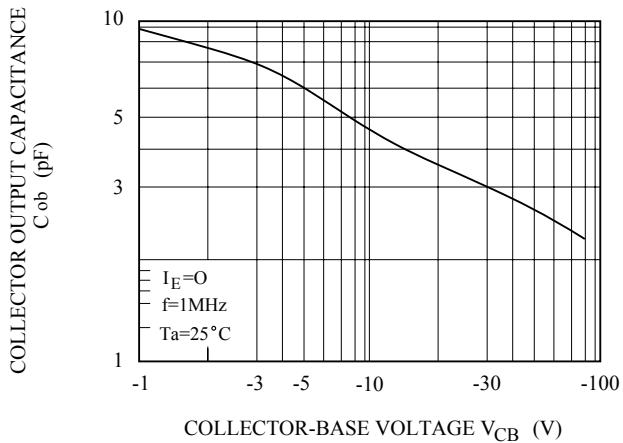
$V_{CE(sat)} - I_C$



$I_C - V_{BE}$



$C_{ob} - V_{CB}$



$P_c - T_a$

