

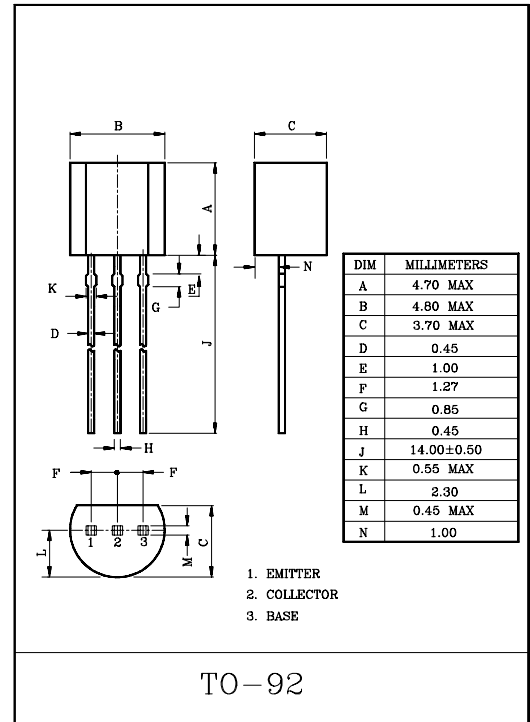
### DIFFERENTIAL AMP. APPLICATION.

### FEATURES

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

### MAXIMUM RATINGS ( $T_a = 25^\circ C$ )

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	$^\circ C$
Storage Temperature Range	$T_{stg}$	-55 ~ 150	$^\circ C$



### ELECTRICAL CHARACTERISTICS ( $T_a = 25^\circ C$ )

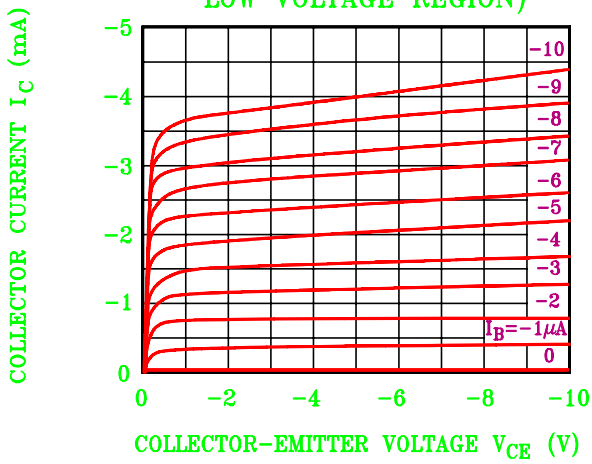
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB} = -120V, I_E = 0$	-	-	-100	nA
Emitter Cut-off Current	$I_{EBO}$	$V_{EB} = -5V, I_C = 0$	-	-	-100	nA
Collector-Emitter Breakdown Voltage	$V_{CEO}$	$I_C = -1mA, I_B = 0$	-120	-	-	V
DC Current Gain	$h_{FE}(\text{Note})$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

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

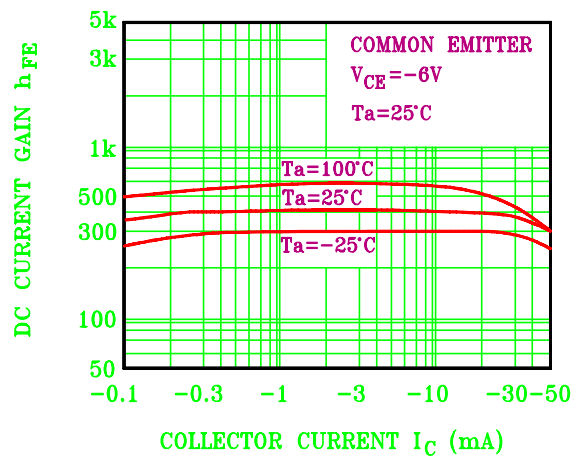
$h_{FE}$ Classification	$h_{FE}$	$h_{FE}$ Classification	$h_{FE}$
GA	200 ~ 220	GE	310 ~ 340
GB	220 ~ 250	GF	340 ~ 370
GC	250 ~ 280	GG	370 ~ 400
GD	280 ~ 310		

# KTA2400

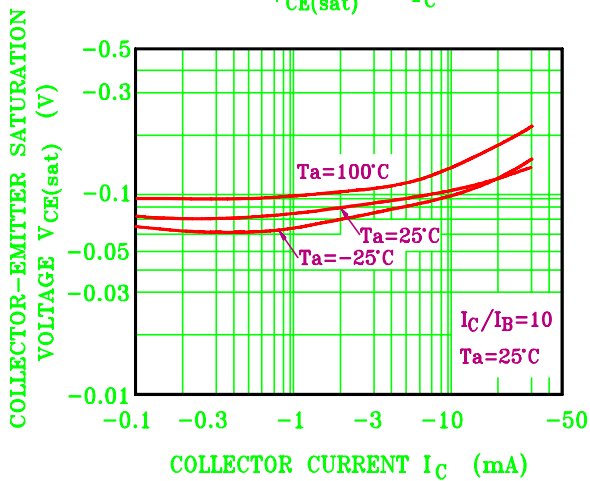
$I_C - V_{CE}$   
(LOW CURRENT AND,  
LOW VOLTAGE REGION)



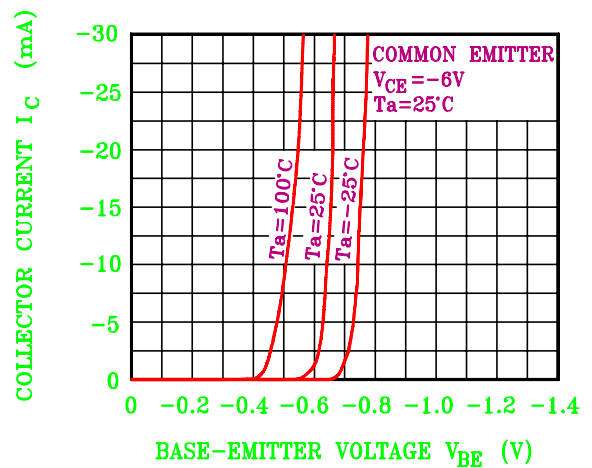
$h_{FE} - I_C$



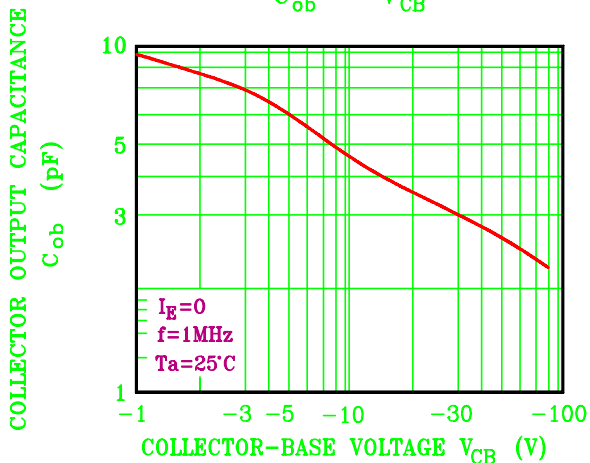
$V_{CE(sat)} - I_C$



$I_C - V_{BE}$



$C_{ob} - V_{CB}$



$P_C - T_a$

