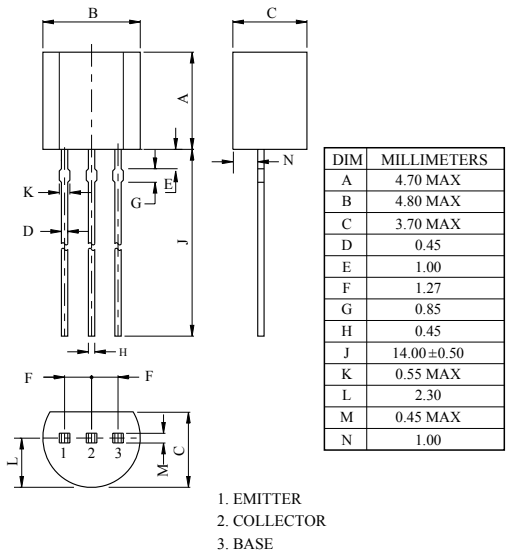
KTC3400

EPITAXIAL PLANAR NPN TRANSISTOR

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 KTA2400.



DIM	MILLIMETERS
A	4.70 MAX
B	4.80 MAX
C	3.70 MAX
D	0.45
E	1.00
F	1.27
G	0.85
H	0.45
J	14.00±0.50
K	0.55 MAX
L	2.30
M	0.45 MAX
N	1.00

1. EMITTER
2. COLLECTOR
3. BASE

TO-92

MAXIMUM RATING (Ta=25℃)

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	℃
Storage Temperature Range	T_{stg}	-55～150	℃

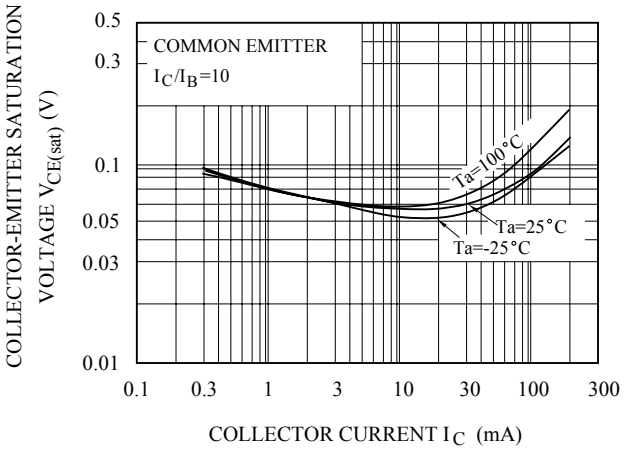
ELECTRICAL CHARACTERISTICS (Ta=25℃)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	V_{CB}=120V, I_E=0	-	-	0.1	μA
Emitter Cut-off Current	I_{EBO}	V_{EB}=5V, I_C=0	-	-	0.1	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=1mA, I_B=0	120	-	-	V
DC Current Gain	h_{FE} (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, Rg=10kΩ	-	1.0	10	dB

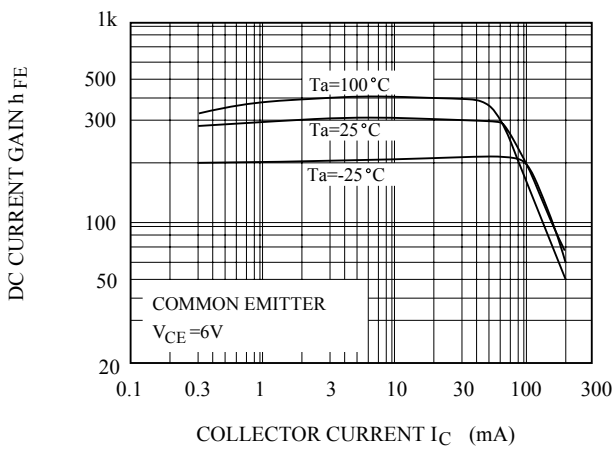
Note : h_{FE} Classification G□:200～400, In case of G□, □:A to G, GR:200~400

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		

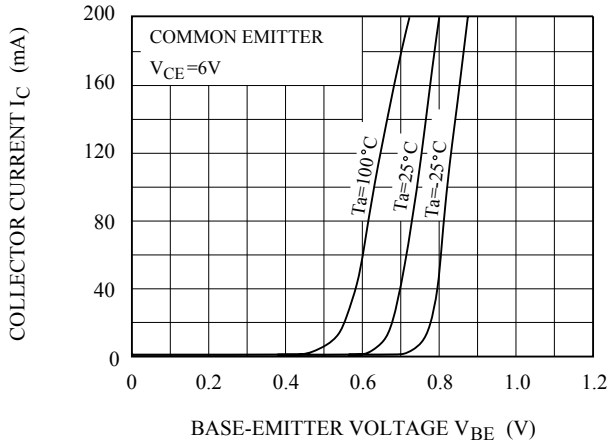
$V_{CE(sat)}$ - I_C



h_{FE} - I_C

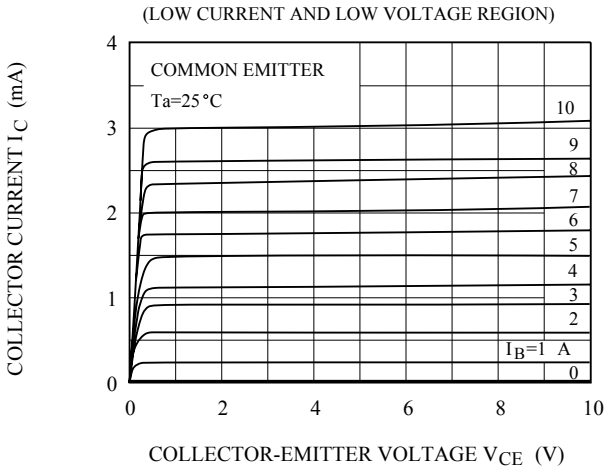


I_C - V_{BE}

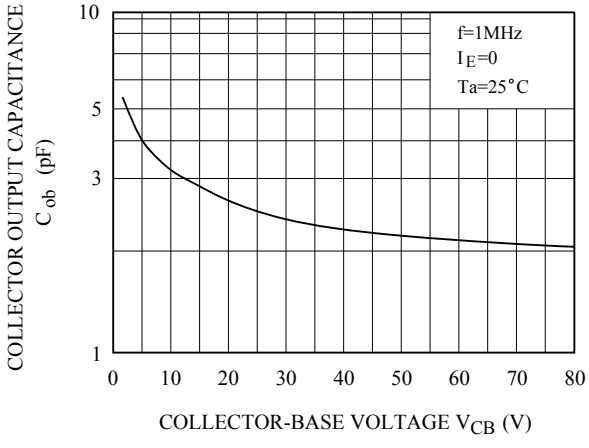


I_C - V_{CE}

(LOW CURRENT AND LOW VOLTAGE REGION)



C_{ob} - V_{CB}



Pc - Ta