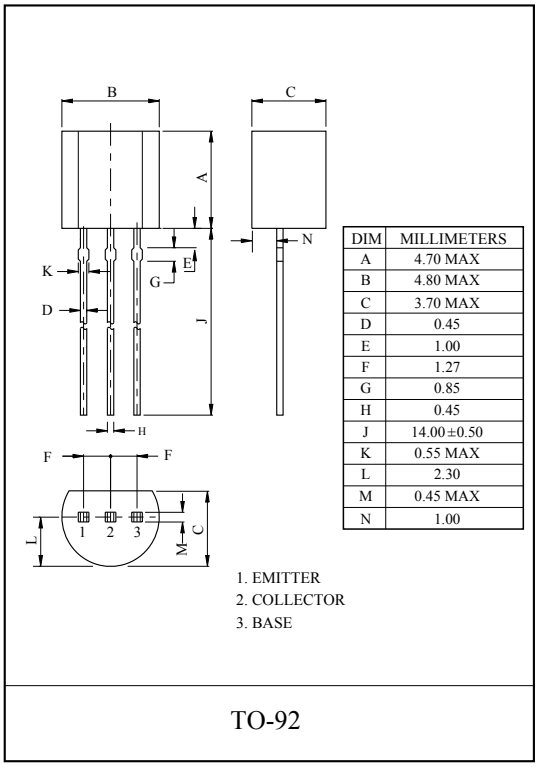
GENERAL PURPOSE APPLICATION.
SWITCHING APPLICATION.

FEATURE

· High DC Current Gain : h_{FE}=600～3600.



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

TO-92

MAXIMUM RATING (Ta=25℃)

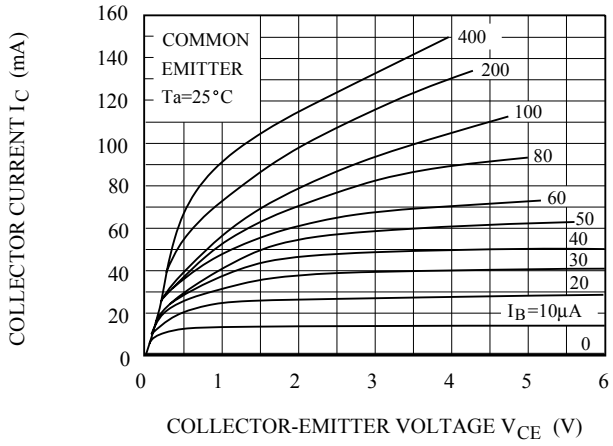
CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	50	V
Collector-Emitter Voltage	V_{CEO}	50	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	150	mA
Base Current	I_B	30	mA
Collector Power Dissipation	P_C	625	mW
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-55～150	℃

ELECTRICAL CHARACTERISTICS (Ta=25℃)

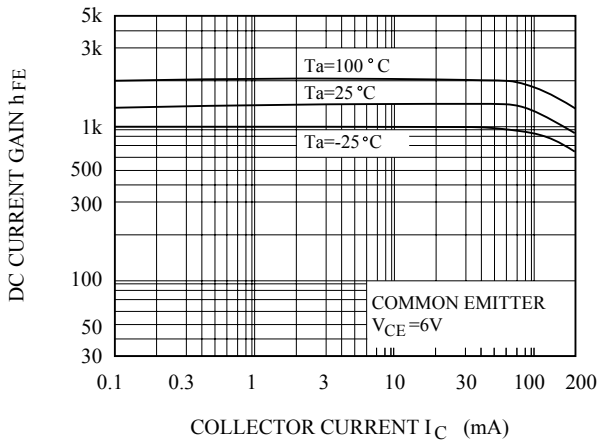
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	V_{CB}=50V, I_E=0	-	-	0.1	μA
Emitter Cut-off Current	I_{EBO}	V_{EB}=5V, I_C=0	-	-	0.1	μA
DC Current Gain	h_{FE}(Note)	V_{CE}=6V, I_C=2mA	600	-	3600	
Collector- Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=100mA, I_B=10mA	-	0.1	0.25	V
Transition Frequency	f_T	V_{CE}=10V, I_C=10mA	100	250	-	MHz
Collector Output Capacitance	C_{ob}	V_{CB}=10V, I_E=0, f=1MHz	-	3.5	-	pF
Noise Figure	NF(1)	V_{CE}=6V, I_C=0.1mA, f=100Hz, Rg=10kΩ	-	0.5	-	dB
	NF(2)	V_{CE}=6V, I_C=0.1mA, f=1kHz, Rg=10kΩ	-	0.3	-	dB

Note: h_{FE} Classification A:600～1800 , B:1200～3600

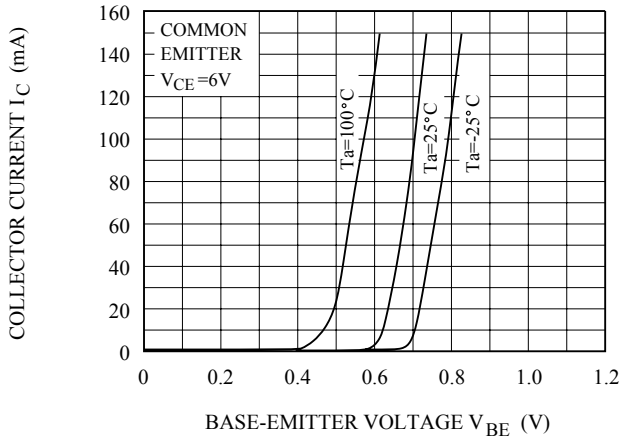
I_C - V_{CE}



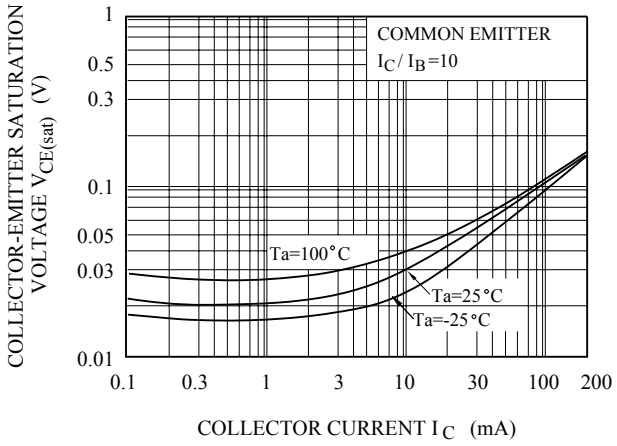
h_{FE} - I_C



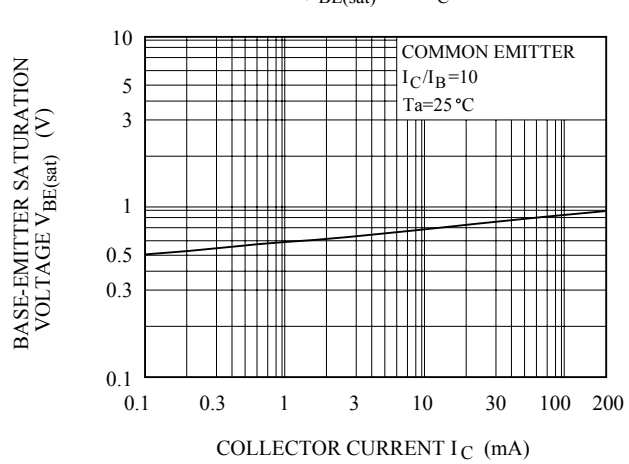
I_C - V_{BE}



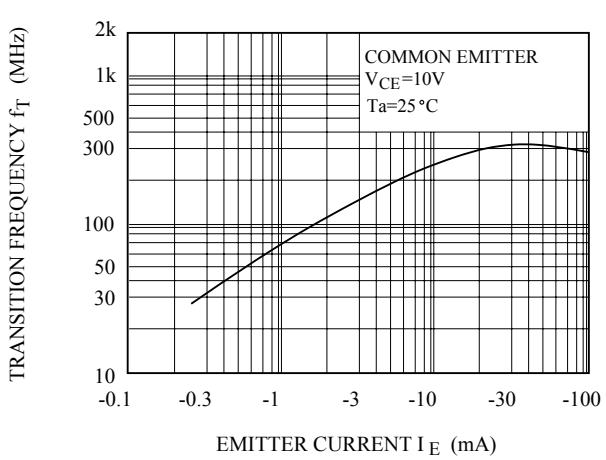
$V_{CE(sat)}$ - I_C

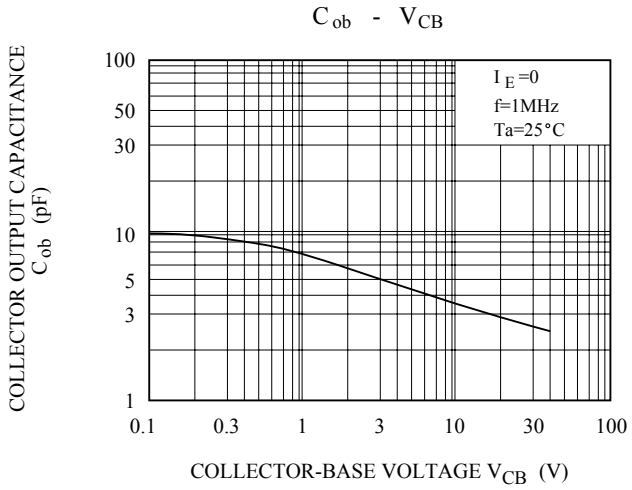


$V_{BE(sat)}$ - I_C



f_T - I_E




C_{ob} - V_{CB}
COLLECTOR OUTPUT CAPACITANCE C_{ob} (pF)
100
50
30
10
5
3
1
0.1
0.3
1
3
10
30
100
I_E=0
f=1MHz
Ta=25°C
COLLECTOR-BASE VOLTAGE V_{CB} (V)