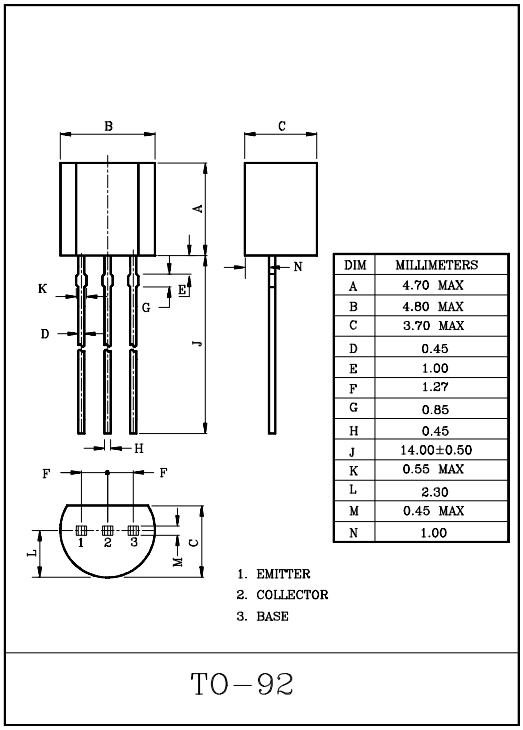
BF420

SILICON NPN TRIPLE DIFFUSED TYPE

HIGH VOLTAGE SWITCHING AND AMPLIFIER APPLICATION.
COLOR TV CHROMA OUTPUT APPLICATIONS.

FEATURES
- High Voltage : V_{CEO}>300V
- Complementary to BF421.



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

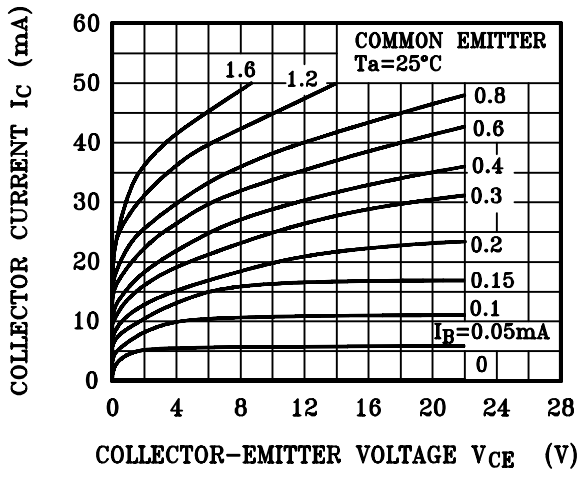
MAXIMUM RATINGS (Ta=25℃)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	300	V
Collector-Emitter Voltage		V_{CEO}	300	V
Emitter-Base Voltage		V_{EBO}	5	V
Collector Current	DC	I_C	50	mA
	Peak	I_{CP}	100	
Collector Power Dissipation		P_C	625	mW
Base Current		I_B	50	mA
Junction Temperature		T_j	150	℃
Storage Temperature Range		T_{stg}	-65~150	℃

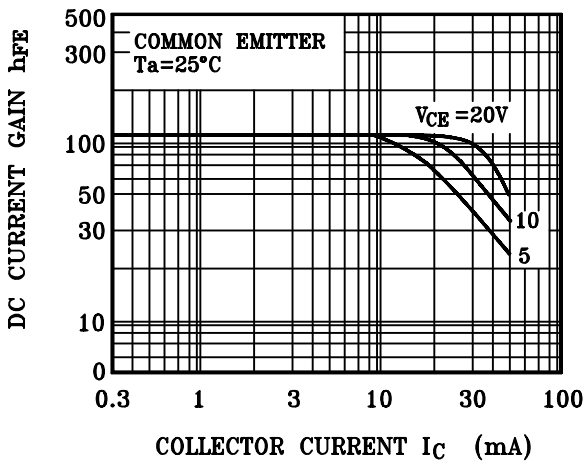
ELECTRICAL CHARACTERISTICS (Ta=25℃)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	V_{CB}=200V, I_E=0	-	-	10	nA
		V_{CB}=200V, I_E=0, Tj=150℃	-	-	10	μA
Emitter Cut-off Current	I_{EBO}	V_{EB}=5V, I_C=0	-	-	50	nA
DC Current Gain	h_{FE}	V_{CE}=20V, I_C=25mA	50	-	-	-
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=30mA, I_B=5mA	-	-	0.6	V
Base-Emitter Voltage	V_{BE}	V_{CE}=20V, I_C=25mA	-	0.75	-	V
Transition Frequency	f_T	V_{CE}=10V, I_C=10mA	60	-	-	MHz
Reverse Transfer Capacitance	C_{re}	V_{CB}=30V, I_E=0, f=1MHz	-	-	1.6	pF

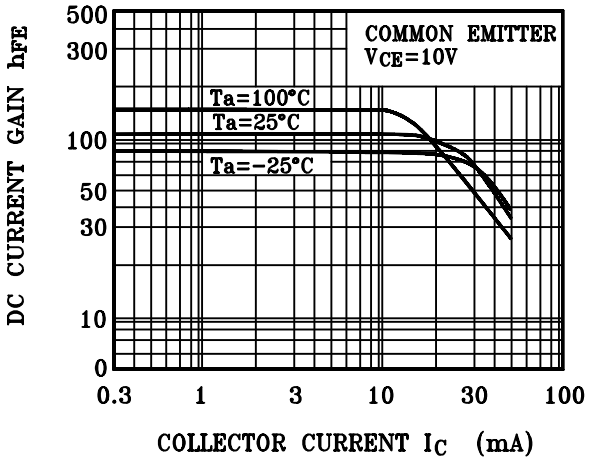
I_C – V_{CE} (LOW VOLTAGE REGION)



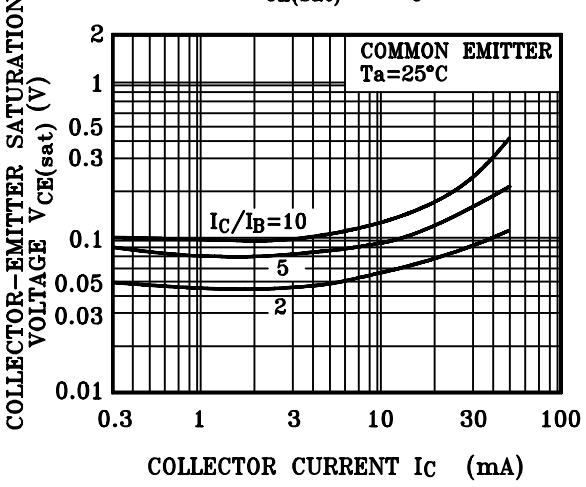
h_{FE} – I_C



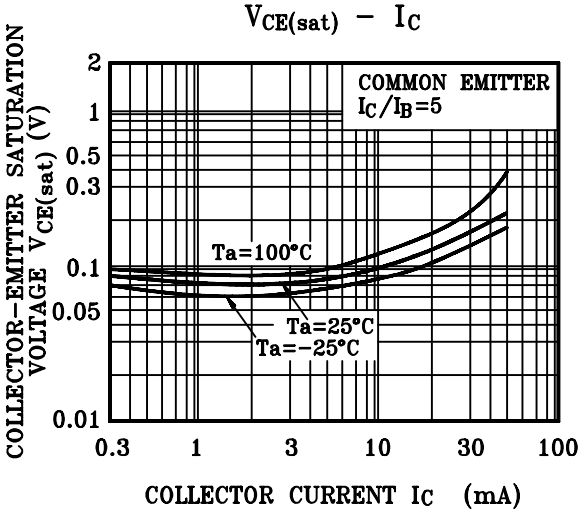
h_{FE} – I_C



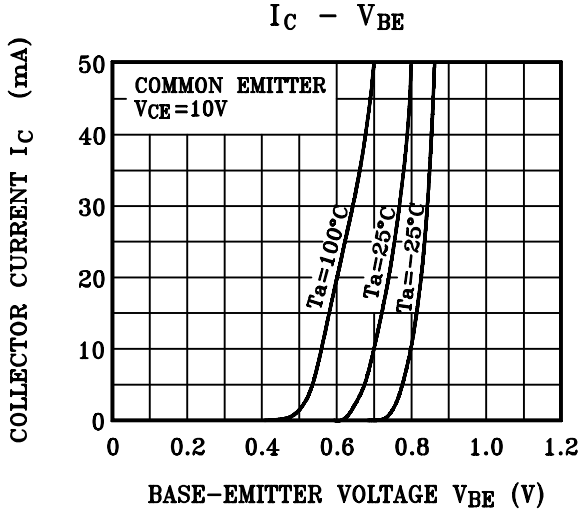
$V_{CE(sat)}$ – I_C



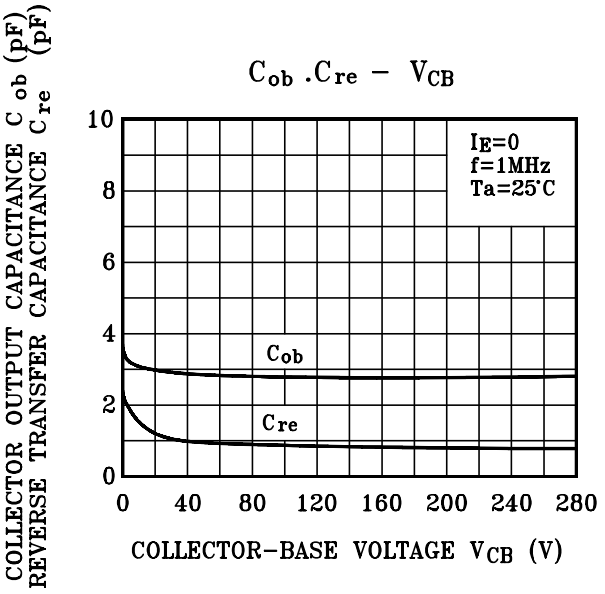
$V_{CE(sat)}$ – I_C



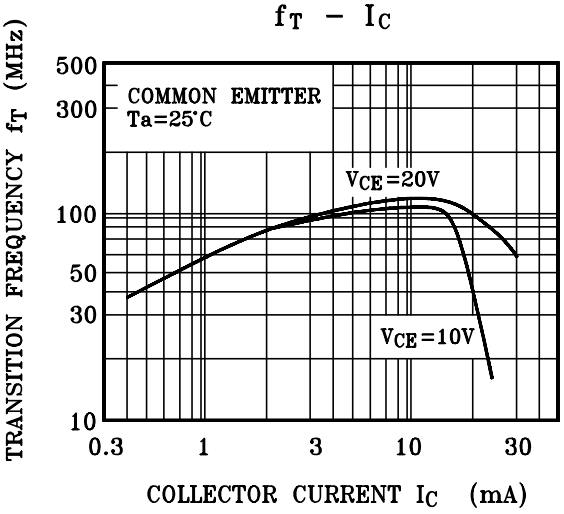
I_C – V_{BE}



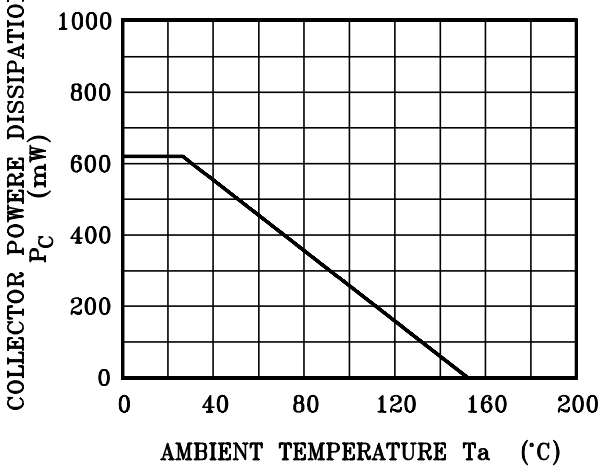
C_{ob} .C_{re} – V_{CB}



f_T – I_C



P_C – Ta



SAFE OPERATING AREA