

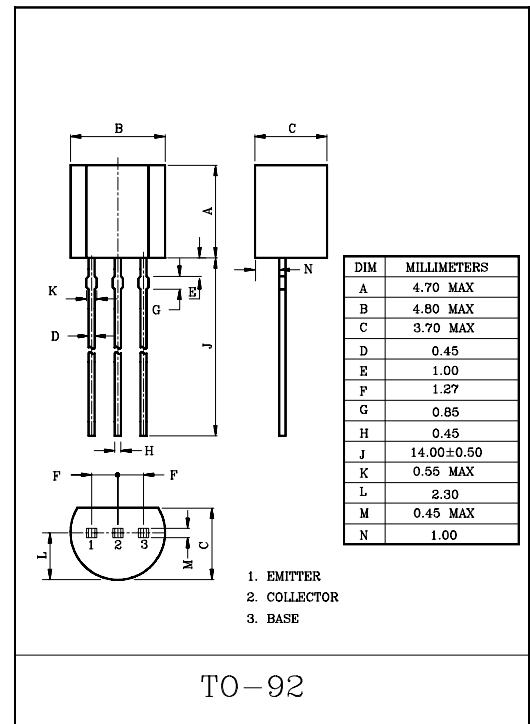
HIGH VOLTAGE SWITCHING AND AMPLIFIER APPLICATION.  
COLOR TV CHROMA OUTPUT APPLICATIONS.

### FEATURES

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

### MAXIMUM RATINGS (Ta=25°C)

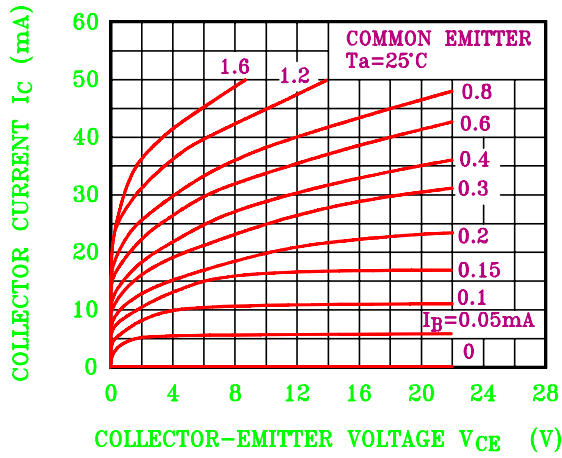
CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CBO}$	300	V
Collector-Emitter Voltage	$V_{CEO}$	300	V
Emitter-Base Voltage	$V_{EBO}$	5	V
Collector Current	DC	$I_C$	50
	Peak	$I_{CP}$	100
Collector Power Dissipation	$P_C$	625	mW
Base Current	$I_B$	50	mA
Junction Temperature	$T_j$	150	°C
Storage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



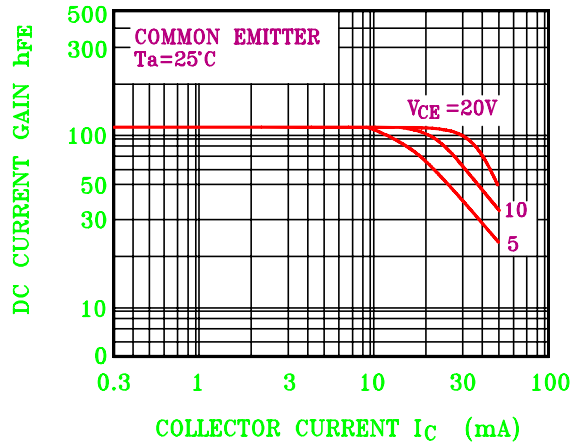
### ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB}=200V, I_E=0$	-	-	10	nA
		$V_{CB}=200V, I_E=0, T_j=150°C$	-	-	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

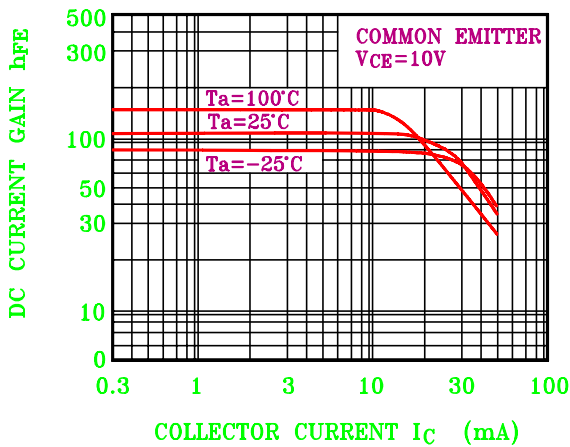
$I_C - V_{CE}$  (LOW VOLTAGE REGION)



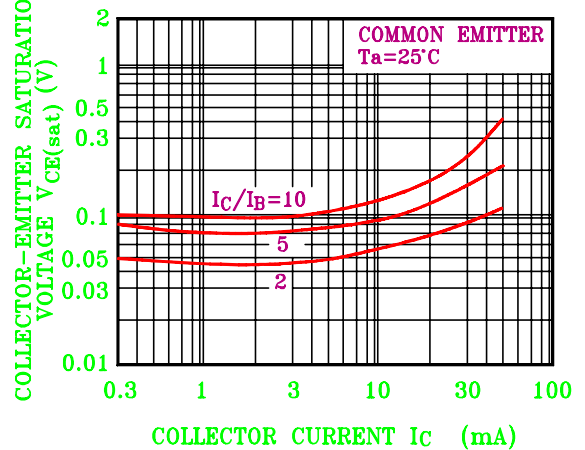
$h_{FE} - I_C$



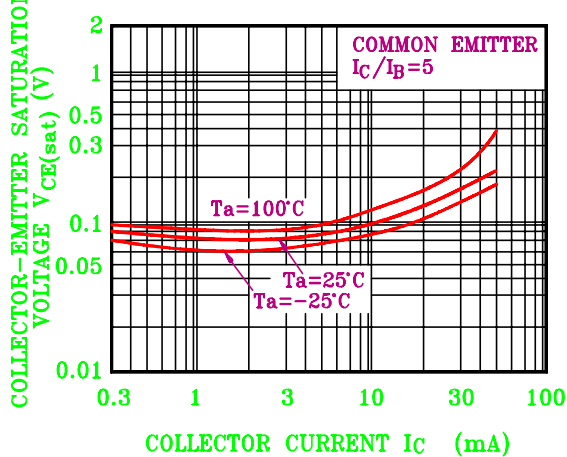
$h_{FE} - I_C$



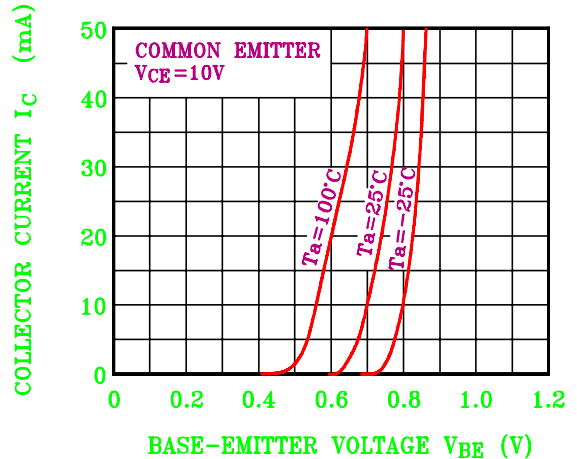
$V_{CE(sat)} - I_C$



$V_{CE(sat)} - I_C$

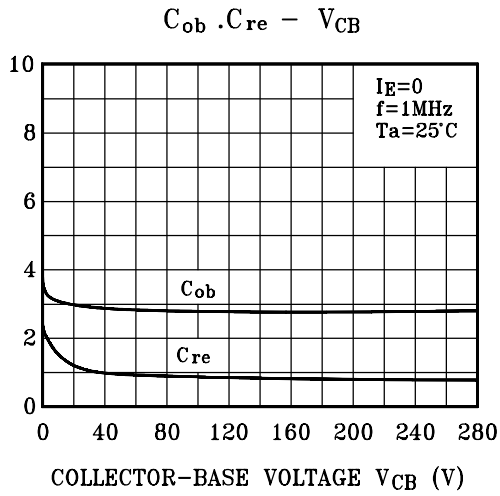


$I_C - V_{BE}$

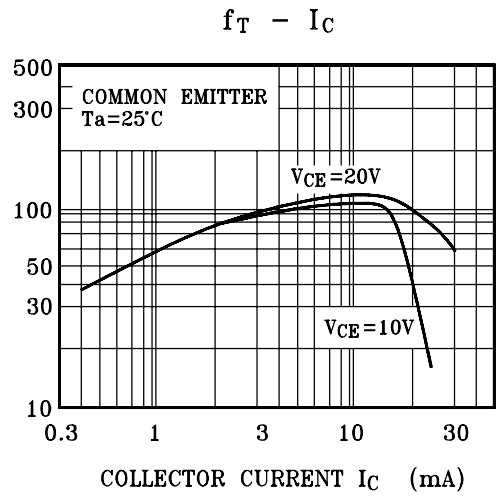


# BF420

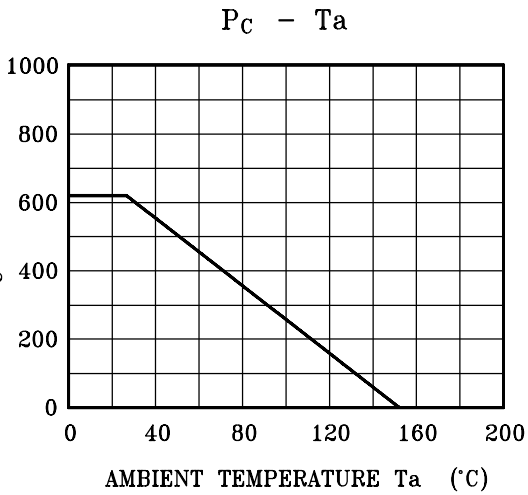
COLLECTOR OUTPUT CAPACITANCE  $C_{ob}$  (pF)  
REVERSE TRANSFER CAPACITANCE  $C_{re}$  (pF)



TRANSITION FREQUENCY  $f_T$  (MHz)



COLLECTOR POWER DISSIPATION  $P_C$  (mW)



COLLECTOR CURRENT  $I_C$  (mA)

