

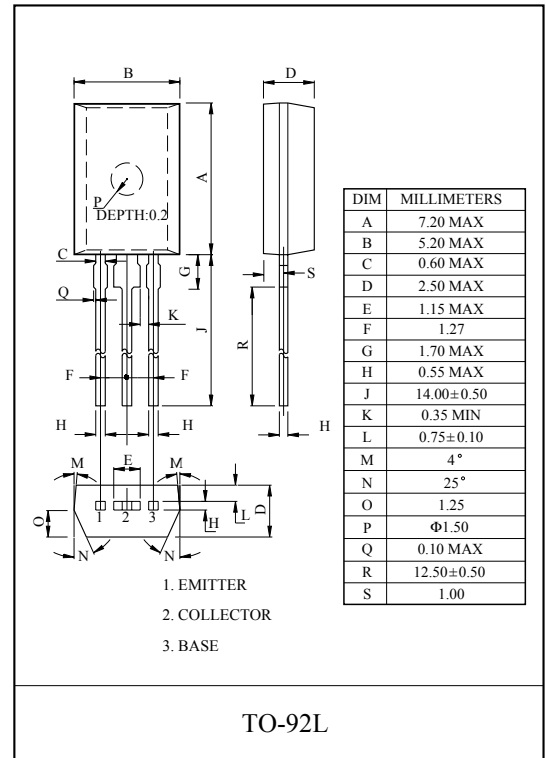
BLACK AND WHITE TV VIDEO OUTPUT APPLICATION.  
HIGH VOLTAGE SWITCHING APPLICATION.

### FEATURES

- High Breakdown Voltage :  $V_{CE0}=150V(\text{Min.})$ .
- Low Output Capacitance :  $C_{ob}=5.0pF(\text{Max.})$ .
- High Transition Frequency :  $f_T=120MHz(\text{Typ.})$ .

### MAXIMUM RATING (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CBO}$	200	V
Collector-Emitter Voltage	$V_{CEO}$	150	V
Emitter-Base Voltage	$V_{EBO}$	5	V
Collector Current	$I_C$	50	mA
Emitter Current	$I_E$	-50	mA
Collector Power Dissipation	$P_C$	1	W
Junction Temperature	$T_j$	150	°C
Storage Temperature Range	$T_{stg}$	-55 ~ 150	°C

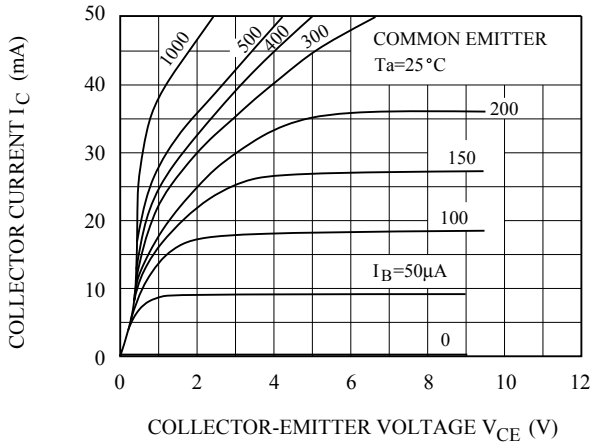


### ELECTRICAL CHARACTERISTICS (Ta=25°C)

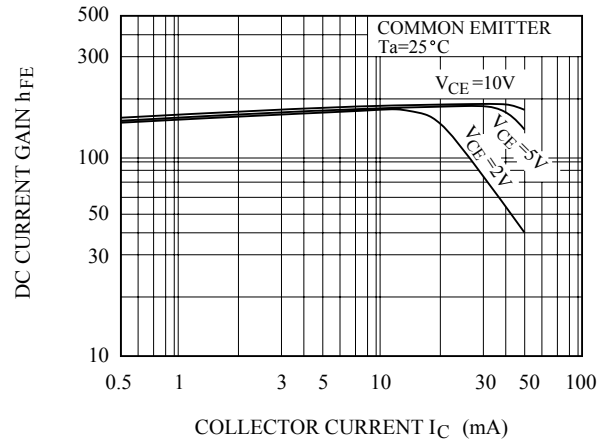
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB}=200V, I_E=0$	-	-	0.1	$\mu A$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=5V, I_C=0$	-	-	0.1	$\mu A$
DC Current Gain	$h_{FE}(\text{Note})$	$V_{CE}=5V, I_C=10mA$	70	-	240	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=10mA, I_B=1mA$	-	-	0.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=10mA, I_B=1mA$	-	-	1.0	V
Transition Frequency	$f_T$	$V_{CE}=30V, I_C=10mA$	-	120	-	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB}=10V, I_E=0, f=1MHz$	-	3.5	5.0	pF

Note :  $h_{FE}$  Classification 0:70 ~ 140, Y:120 ~ 240

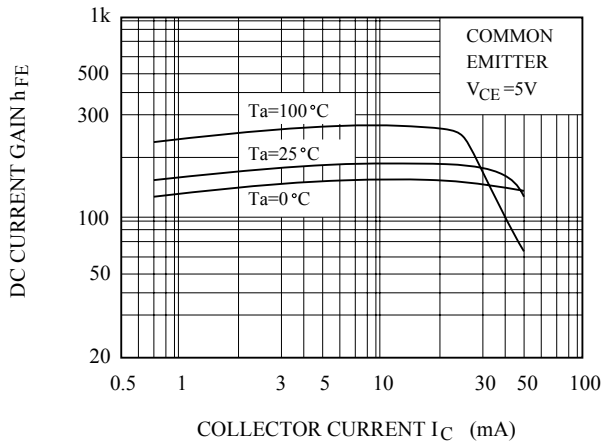
$I_C - V_{CE}$



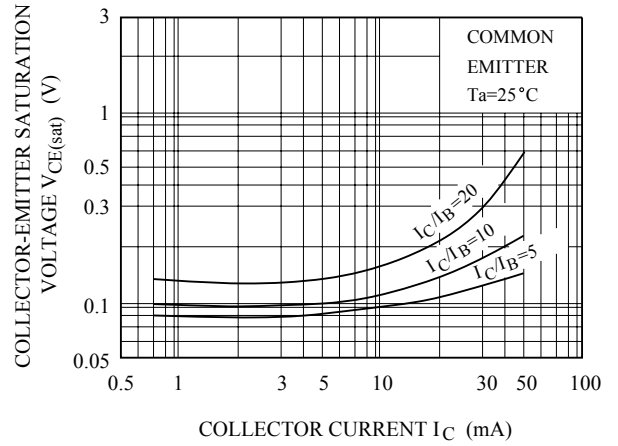
$h_{FE} - I_C$



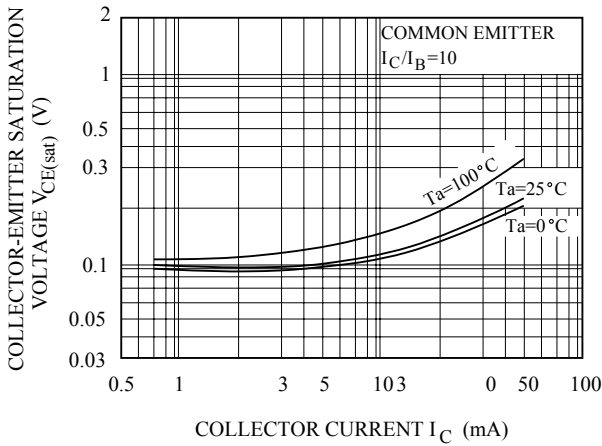
$h_{FE} - I_C$



$V_{CE(sat)} - I_C$



$V_{CE(sat)} - I_C$



$I_C - V_{BE}$

