

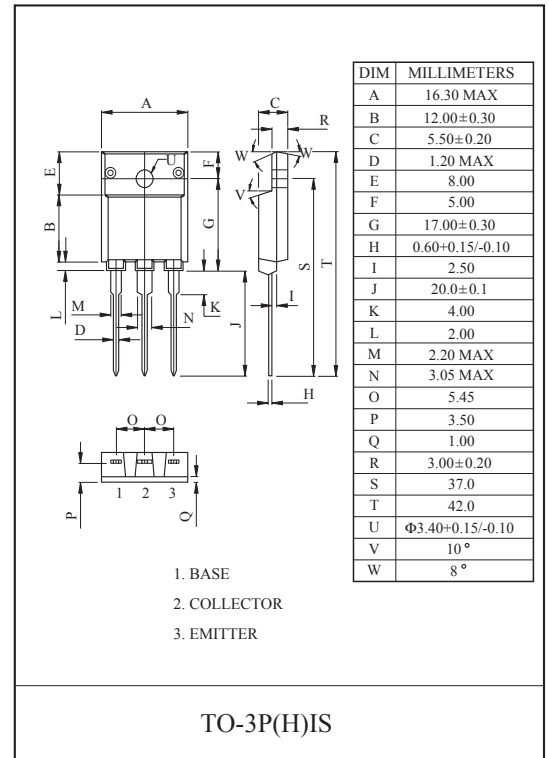
COLOR TV HORIZONTAL OUTPUT APPLICATION.

FEATURES

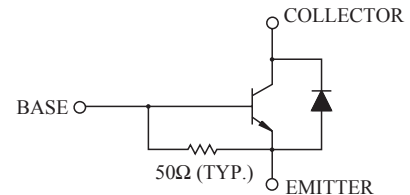
- High Voltage : $V_{CBO} \geq 1500V$.
- Low Saturation Voltage : $V_{CE(sat)} = 5V(\text{Max.})$ ($I_C = 4A, I_B = 0.8A$).
- High Speed : $t_f = 0.3\mu S(\text{Typ.})$
- Built-in Damper Diode.
- Collector Metal (Fin) is Fully Covered with Mold Resin.

MAXIMUM RATING (Ta=25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	1500	V
Collector-Emitter Voltage		V_{CEO}	600	V
Emitter-Base Voltage		V_{EBO}	5	V
Collector Current	DC	I_C	6	A
	Pulse	I_{cp}	12	
Base Current		I_B	3	A
Collector Power Dissipation		P_C	50	W
Junction Temperature		T_j	150	°C
Storage Temperature Range		T_{stg}	-55 ~ 150	°C



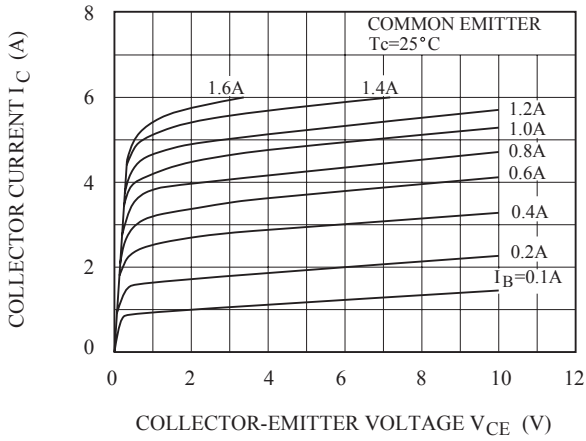
EQUIVALENT CIRCUIT



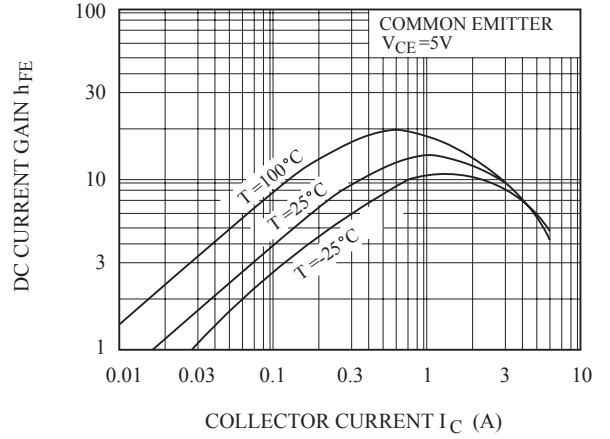
ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I_{CBO}	$V_{CB} = 1500V, I_E = 0$	-	-	1	mA
Emitter Cut-off Current		I_{EBO}	$V_{EB} = 5V, I_C = 0$	67	-	200	mA
Emitter-Base Breakdown Voltage		V_{EBO}	$I_E = 400mA, I_C = 0$	5	-	-	V
DC Current Gain		$h_{FE(1)}$	$V_{CE} = 5V, I_C = 1A$	8	-	25	
		$h_{FE(2)}$	$V_{CE} = 5V, I_C = 4A$	5	-	9	
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$	$I_C = 4A, I_B = 0.8A$	-	-	5	V
Base-Emitter Saturation Voltage		$V_{BE(sat)}$	$I_C = 4A, I_B = 0.8A$	-	0.9	1.2	V
Forward Voltage (Damper Diode)		$-V_F$	$I_F = 6A$	-	1.6	2.0	V
Transition Frequency		f_T	$V_{CE} = 10V, I_C = 0.1A$	-	2	-	MHz
Collector Output Capacitance		C_{ob}	$V_{CB} = 10V, I_E = 0, f = 1MHz$	-	95	-	pF
Switching Time	Storage Time	t_{stg}	$I_{CP} = 4A, I_{B1(end)} = 0.8A$	-	7.5	10	μS
	Fall Time	t_f	$f_H = 15.75kHz$	-	0.3	0.6	

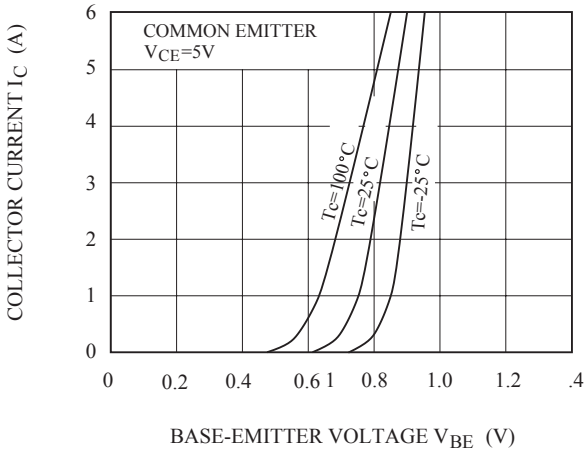
$I_C - V_{CE}$



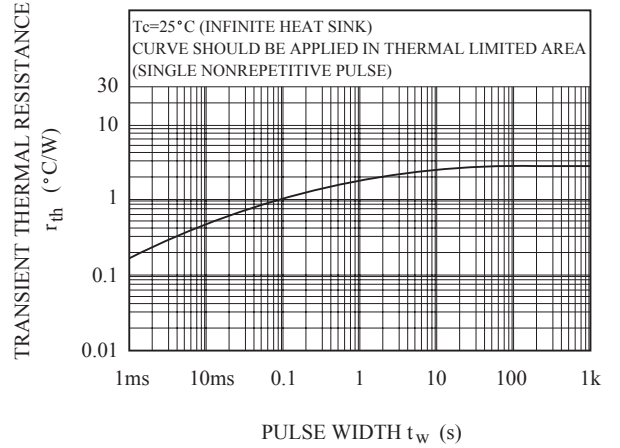
$h_{FE} - I_C$



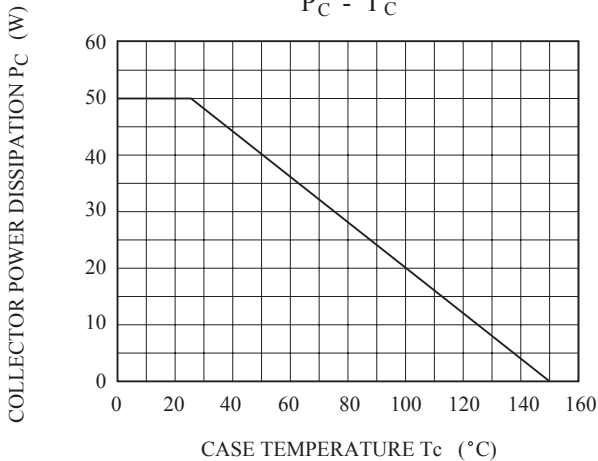
$I_C - V_{BE}$



$r_{th} - t_w$



$P_C - T_C$



SAFE OPERATING AREA

