

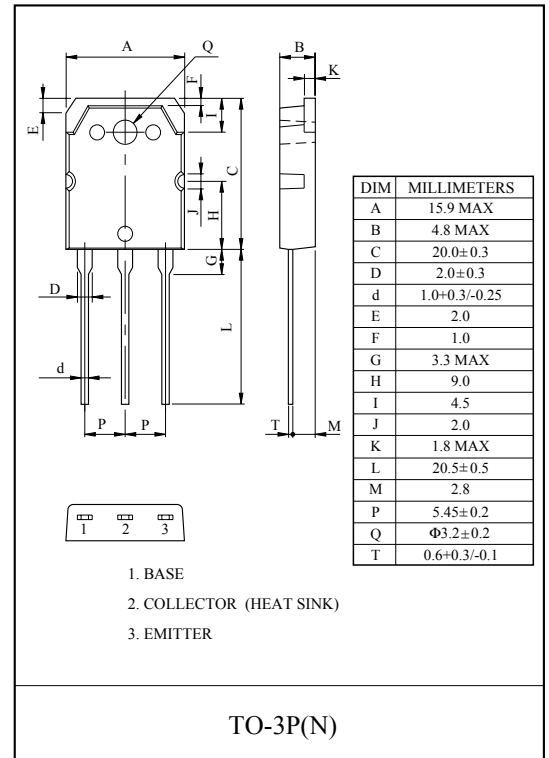
HIGH POWER AMPLIFIER APPLICATION.

### FEATURES

- Complementary to TIP34C.
- Recommended for 45W ~ 50W Audio Frequency Amplifier Output Stage.

### MAXIMUM RATING (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CBO}$	100	V
Collector-Emitter Voltage	$V_{CEO}$	100	V
Emitter-Base Voltage	$V_{EBO}$	6	V
Collector Current	$I_C$	10	A
Base Current	$I_B$	3	A
Collector Power Dissipation (Tc=25°C)	$P_C$	80	W
Junction Temperature	$T_j$	150	°C
Storage Temperature Range	$T_{stg}$	-55 ~ 150	°C



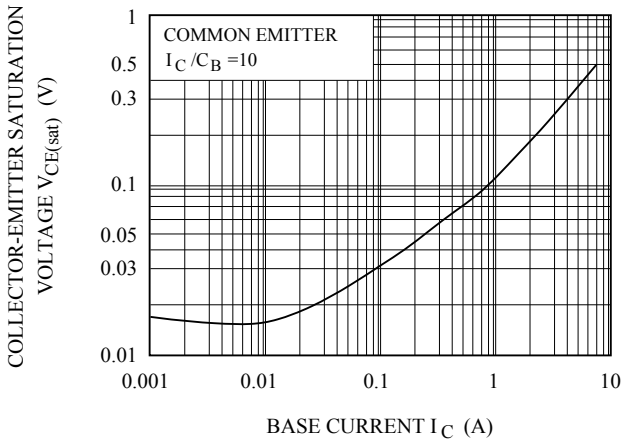
### ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB}=100V, I_E=0$	-	-	10	μA
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=6V, I_C=0$	-	-	10	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=25mA, I_B=0$	100	-	-	V
DC Current Gain	$h_{FE}$ (Note)	$V_{CE}=4V, I_C=2A$	55	-	160	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=4A, I_B=0.4A$	-	-	1.0	V
Transition Frequency	$f_T$	$V_{CE}=12V, I_C=0.5A$	-	20	-	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB}=10V, I_E=0, f=1MHz$	-	150	-	pF

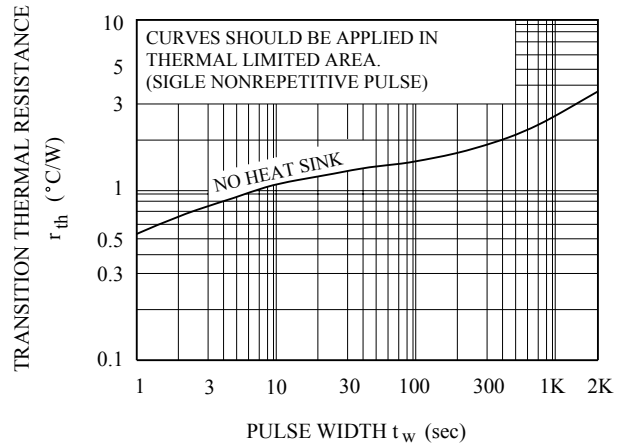
Note :  $h_{FE}$  Classification R:55~110, O:80~160

# TIP33C

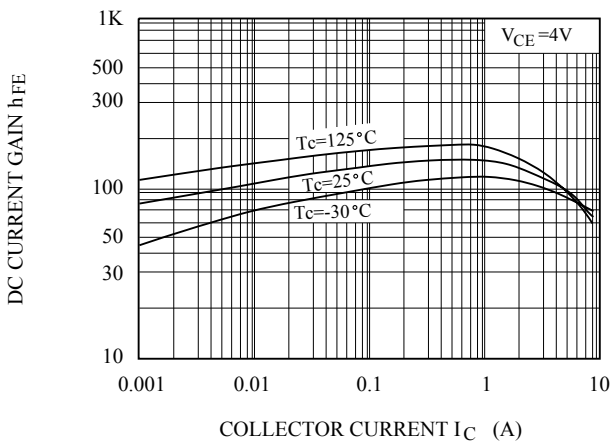
$V_{CE(sat)} - I_C$



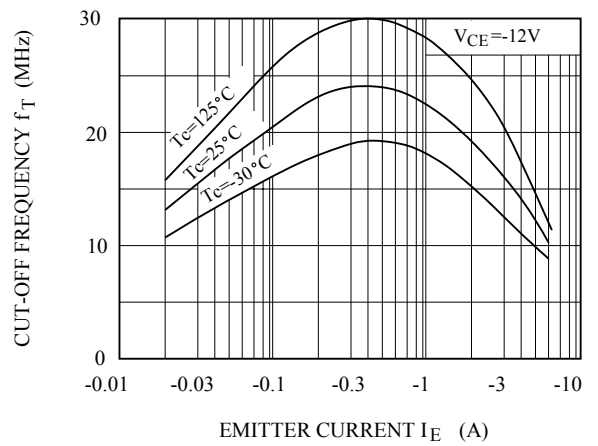
$r_{th} - t_w$



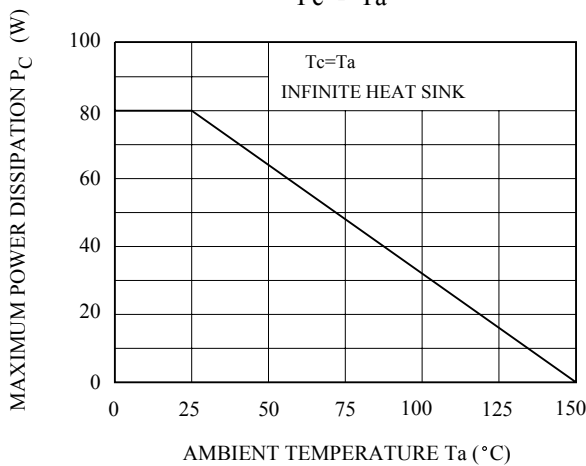
$h_{FE} - I_C$



$f_T - I_E$



$P_c - T_a$



SAFE OPERATING AREA

