

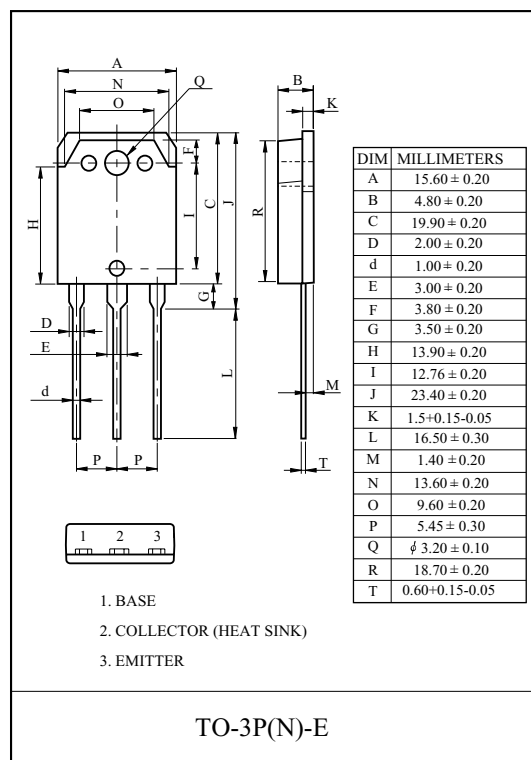
HIGH POWER AMPLIFIER APPLICATION.

FEATURES

- Recommended for 75W Audio Frequency Amplifier Output Stage.
- Complementary to TIP36CA.
- I_{Cmax} :25A.

MAXIMUM RATING ($T_a=25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	100	V
Collector-Emitter Voltage	V_{CEO}	100	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	25	A
Base Current	I_B	5.0	A
Collector Power Dissipation ($T_c=25^\circ\text{C}$)	P_C	125	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 ~ 150	$^\circ\text{C}$

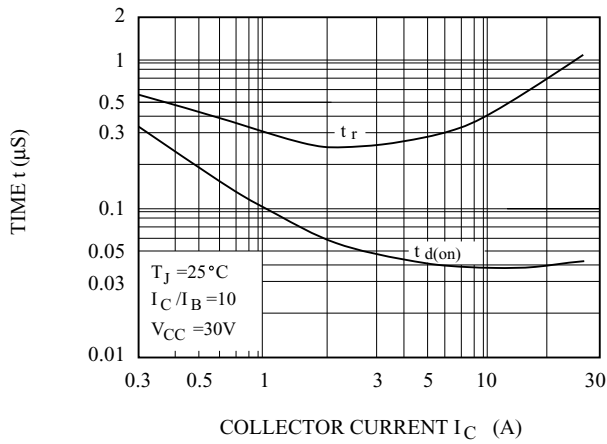
ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=100\text{V}$, $I_E=0$	-	-	10	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5\text{V}$, $I_C=0$	-	-	10	μA
Collector-emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=50\text{mA}$, $I_B=0$	100	-	-	V
DC Current Gain	$h_{FE}(1)$ (Note)	$V_{CE}=5\text{V}$, $I_C=1.5\text{A}$	55	-	160	
	$h_{FE}(2)$	$V_{CE}=4\text{V}$, $I_C=15\text{A}$	15	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}(1)$	$I_C=15\text{A}$, $I_B=1.5\text{A}$	-	-	1.8	V
	$V_{CE(sat)}(2)$	$I_C=25\text{A}$, $I_B=5.0\text{A}$	-	-	4.0	
Base-Emitter Voltage	V_{BE}	$V_{CE}=5\text{V}$, $I_C=5\text{A}$	-	-	1.5	V
Transition Frequency	f_T	$V_{CE}=5\text{V}$, $I_C=1\text{A}$	3.0	-	-	MHz

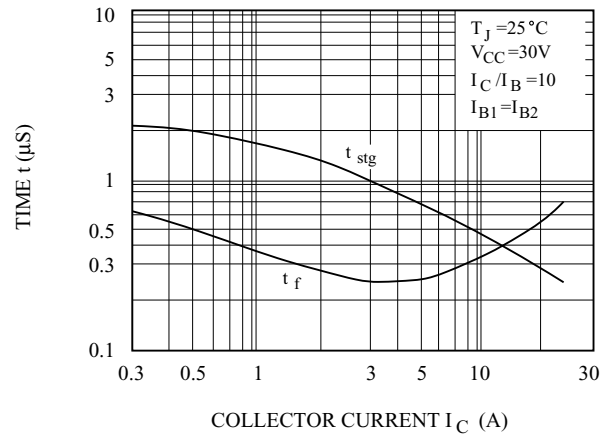
Note : $h_{FE}(1)$ Classification R:55~110, O:80~160

TIP35CA

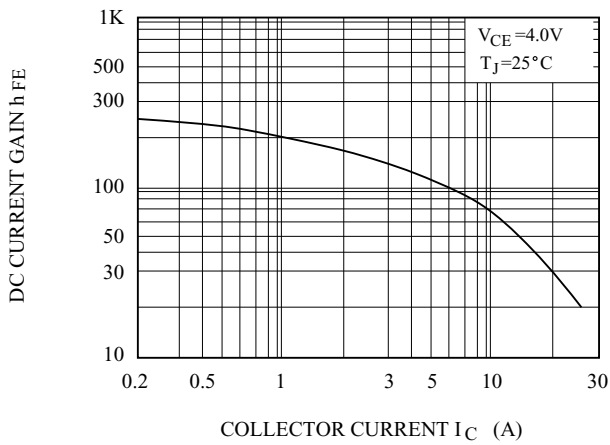
SWITCHING CHARACTERISTICS



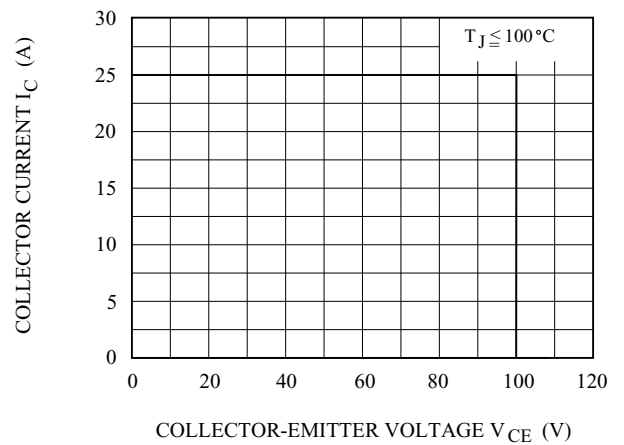
SWITCHING CHARACTERISTICS



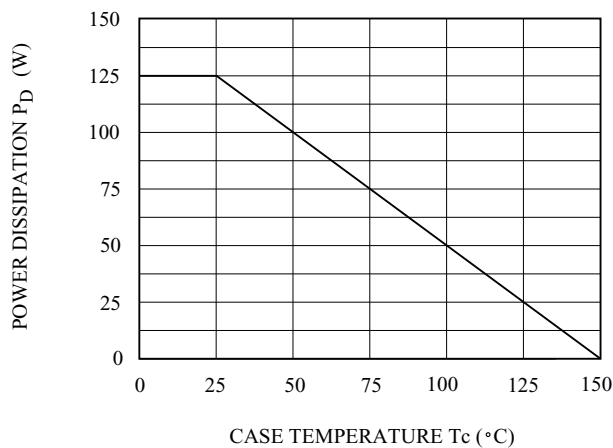
$h_{FE} - I_C$



REVERSE BIAS SAFE OPERATING AREA



$P_D - T_c$



FORWARD BIAS SAFE OPERATING AREA

