

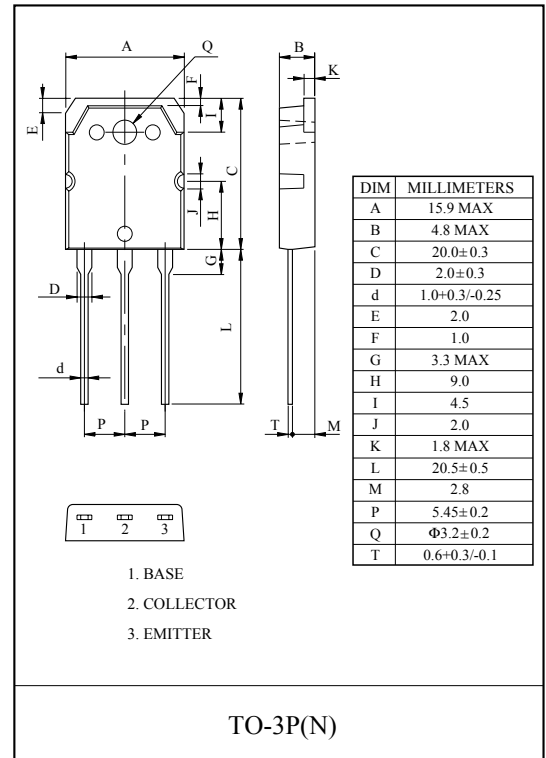
HIGH POWER AMPLIFIER
DARLINGTON APPLICATION.

FEATURES

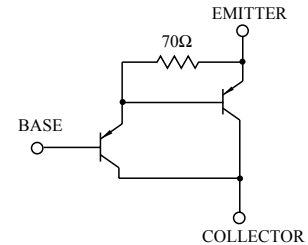
- Complementary to KTD1510
- Recommended for 60W Audio Amplifier Output Stage.

MAXIMUM RATING (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	-160	V
Collector-Emitter Voltage	V_{CEO}	-150	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-10	A
Base Current	I_B	-1	A
Collector Power Dissipation (Tc=25°C)	P_C	100	W
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55 ~ 150	°C



EQUIVALENT CIRCUIT

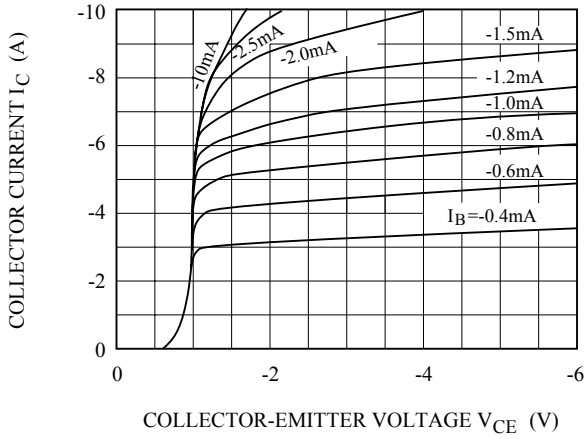


ELECTRICAL CHARACTERISTICS (Ta=25°C)

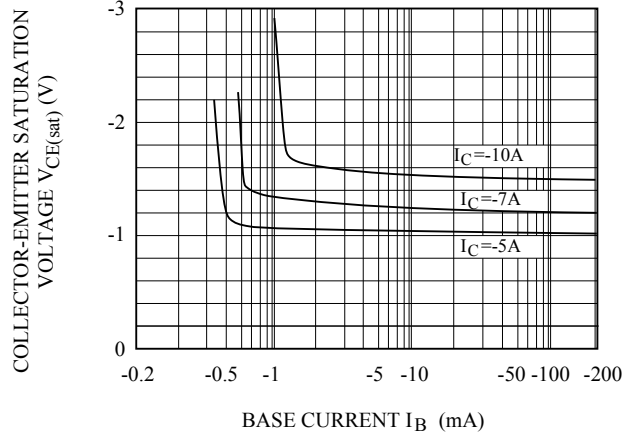
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=-160V, I_E=0$	-	-	-100	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=-5V, I_C=0$	-	-	-100	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=-30mA, I_B=0$	-150	-	-	V
DC Current Gain	h_{FE}	$V_{CE}=-4V, I_C=-7A$	5000	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-7A, I_B=-7mA$	-	-	-2.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=-7A, I_B=-7mA$	-	-	-3.0	V
Transition Frequency	f_T	$V_{CE}=-12V, I_C=-2A$	-	50	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=-10V, I_E=0, f=1MHz$	-	230	-	pF

KTB2510

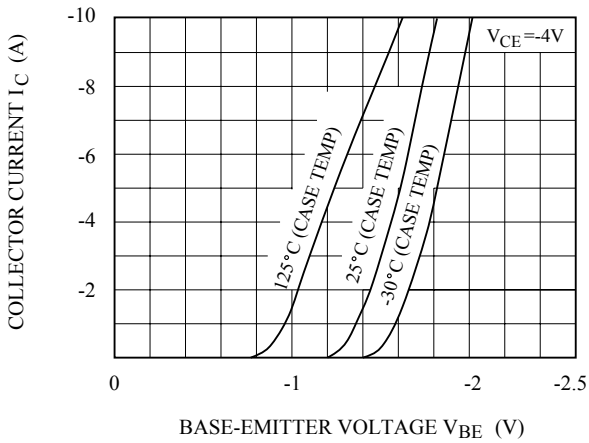
$I_C - V_{CE}$



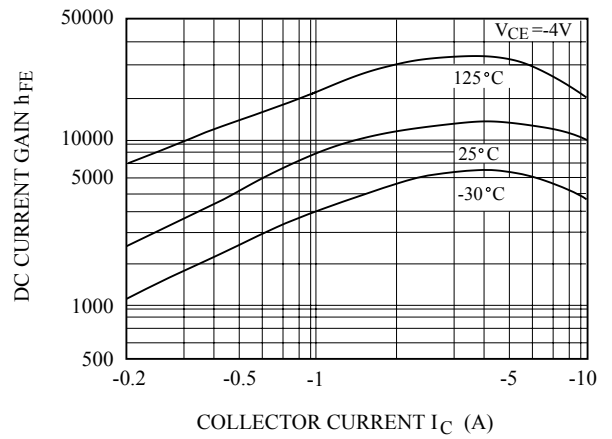
$V_{CE(sat)} - I_B$



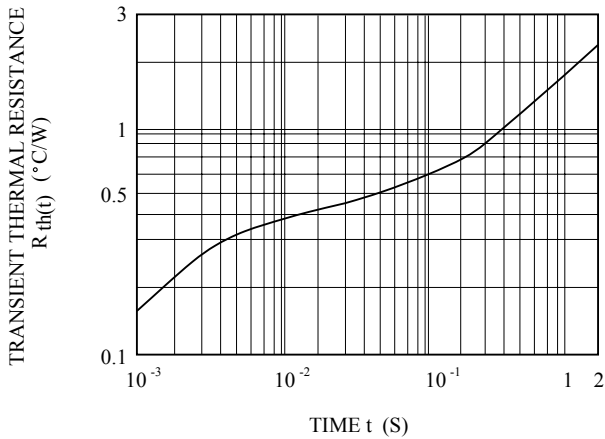
$I_C - V_{BE}$



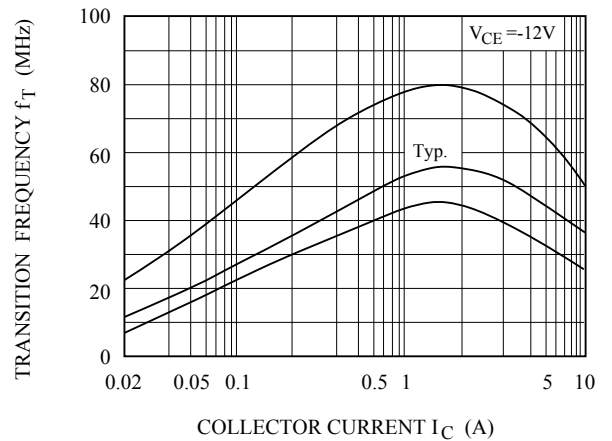
$h_{FE} - I_C$



$R_{th(t)} - t$

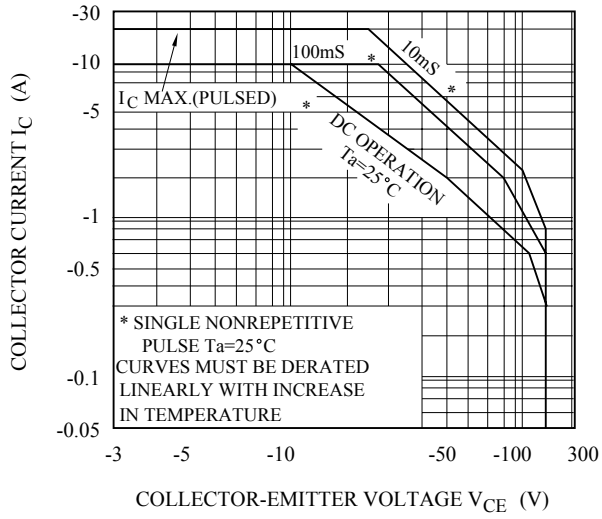


$f_T - I_C$



KTB2510

SAFE OPERATING AREA



Pc - Ta

