

TRIPLE DIFFUSED NPN TRANSISTOR

FEATURES

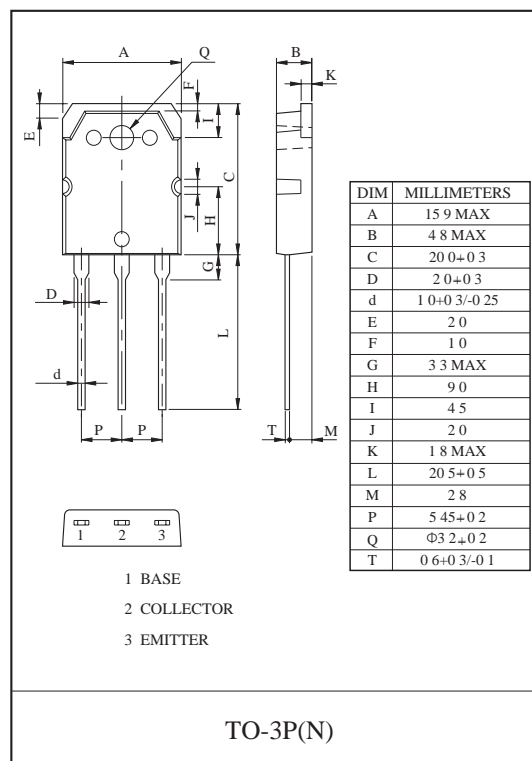
- Recommended for 45~50W Audio Frequency Amplifier Output Stage.

APPLICATIONS

- High Power Amplifier

MAXIMUM RATING (Ta=25°C unless otherwise noted)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	120	V
Collector-Emitter Voltage	V_{CEO}	120	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	80	W
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55~150	°C



ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise noted)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=120V, I_E=0$	-	-	10	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5V, I_C=0$	-	-	10	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=50mA, I_B=0$	120	-	-	V
DC Current Gain	$h_{FE}(\text{Note})$	$V_{CE}=5V, I_C=1A$	55	-	160	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=6A, I_B=0.6A$	-	-	2.0	V
Base-Emitter Voltage	V_{BE}	$V_{CE}=5V, I_C=5A$	-	-	1.5	V
Transition Frequency	f_T	$V_{CE}=5V, I_C=1A$	-	12	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$	-	170	-	pF

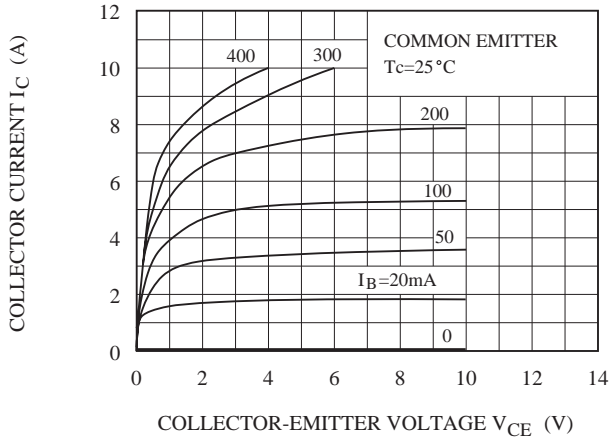
Note : h_{FE} Classification R:55~110, O:80~160



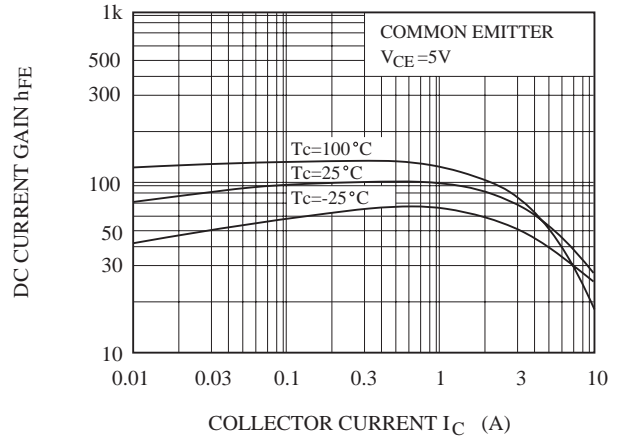
FTD718

RATINGS AND CHARACTERISTIC CURVES

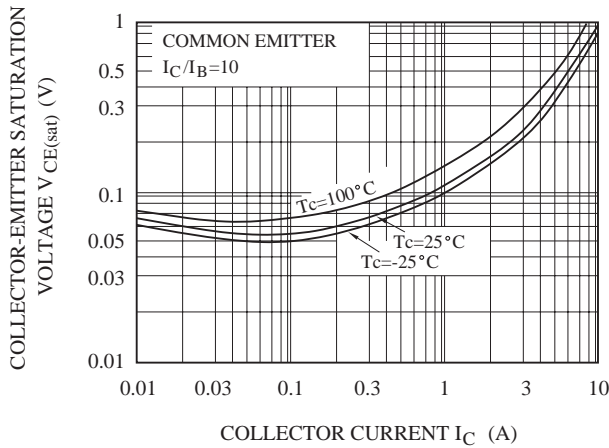
$I_C - V_{CE}$



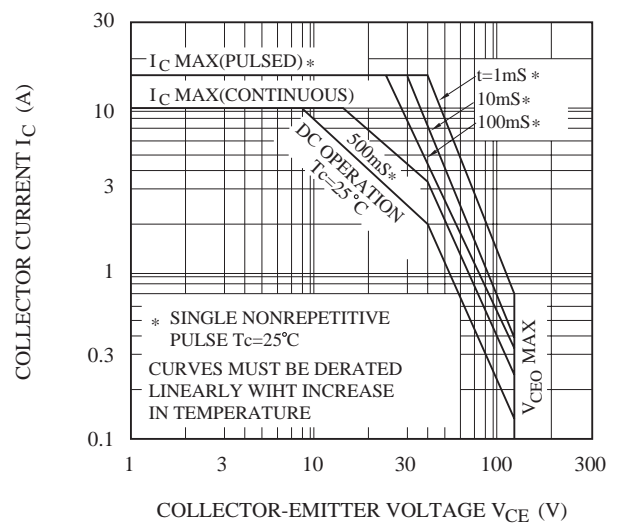
$h_{FE} - I_C$



$V_{CE(sat)} - I_C$



SAFE OPERATING AREA



$P_C - T_a$

