SILICON PNP TRIPLE DIFFUSED TYPE

2SB688

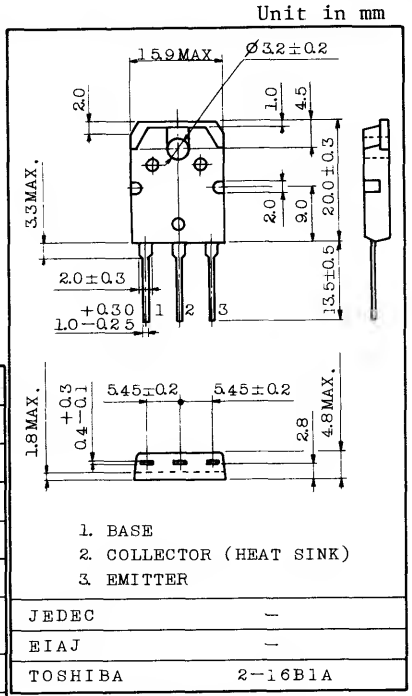
AUDIO FREQUENCY POWER AMPLIFIER APPLICATIONS.

FEATURES:

. Complementary to 2SD718.

. Recommended for 45 ~ 50W audio frequency amplifier output stage.

Unit in mm



1. BASE
2. COLLECTOR (HEAT SINK)
3. EMITTER

JEDEC	—
EIAJ	—
TOSHIBA	2-16B1A

Weight : 4.6g

MAXIMUM RATINGS (Ta=25°C)

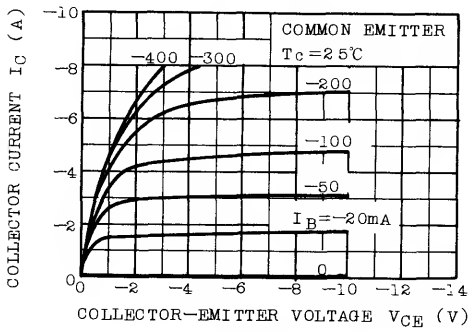
CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	-120	V
Collector-Emitter Voltage	V_{CEO}	-120	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-8	A
Base Current	I_B	-0.8	A
Collector Power Dissipation (Tc=25°C)	P_C	80	W
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55 ~ 150	°C

ELECTRICAL CHARACTERISTICS (Ta=25°C)

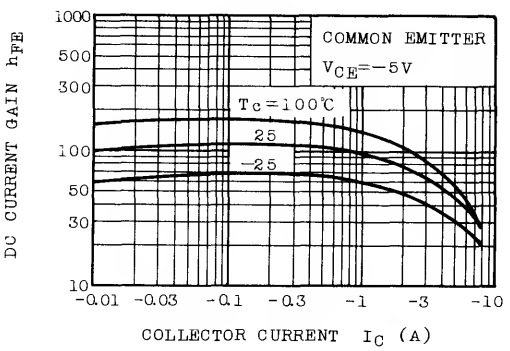
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	V_{CB}=-120V, I_E=0	-	-	-10	μA
Emitter Cut-off Current	I_{EBO}	V_{EB}=-5V, I_C=0	-	-	-10	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=-50mA, I_B=0	-120	-	-	V
DC Current Gain	h_{FE} (Note)	V_{CE}=-5V, I_C=-1A	55	-	160	
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=-5A, I_B=-0.5A	-	-	-2.5	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	-	10	-	MHz
Collector Output Capacitance	Cob	V_{CB}=-10V, I_E=0, f=1MHz	-	280	-	pF

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

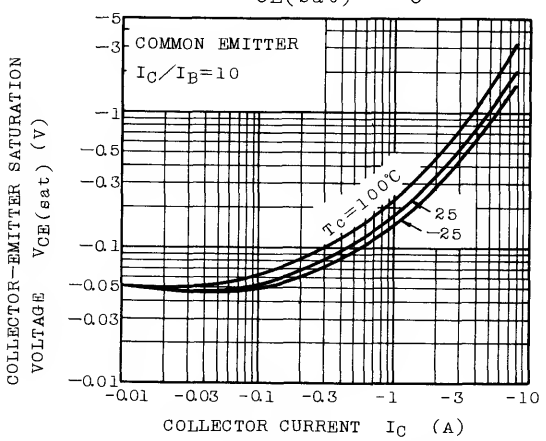
I_C - V_{CE}



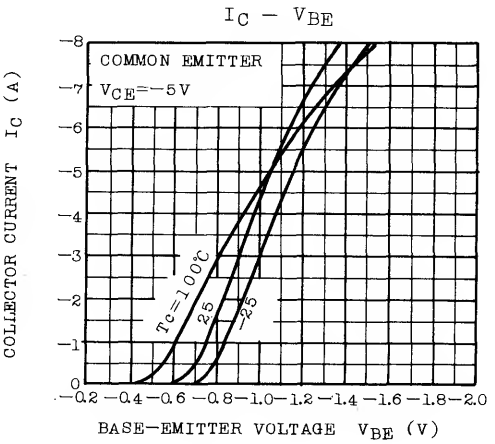
h_{FE} − I_C



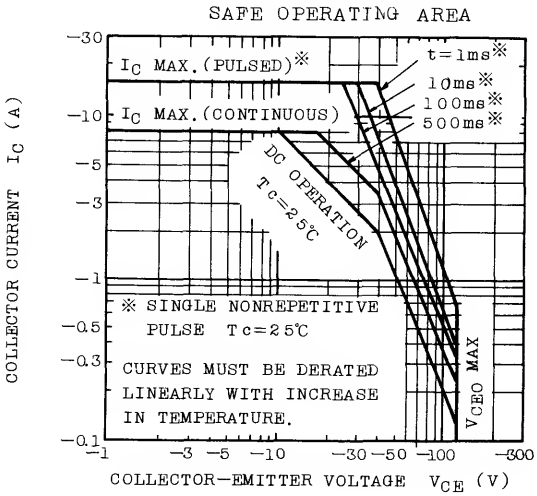
$V_{CE(sat)}$ − I_C



I_C − V_{BE}



SAFE OPERATING AREA



P_C − Ta