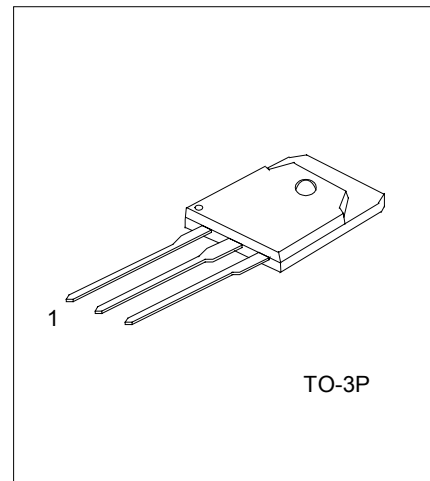


## HIGH POWER AMPLIFIER APPLICATION

## FEATURES

- \* Complementary to 2SD718.
- \* Recommended for 45 ~ 50W Audio Frequency Amplifier Output Stage.



1: BASE 2: COLLECTOR 3: EMITTER

\*Pb-free plating product number: 2SB688L

## ABSOLUTE MAXIMUM RATINGS

(Ta=25°C)

PARAMETER	SYMBOL	RATINGS	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 (T <sub>C</sub> =25°C)	$P_C$	80	W
Junction Temperature	$T_J$	150	°C
Storage Temperature Range	$T_{STG}$	-40 ~ +150	°C

## ELECTRICAL CHARACTERISTICS

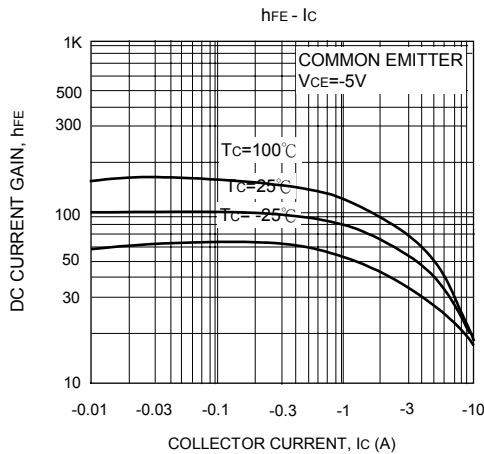
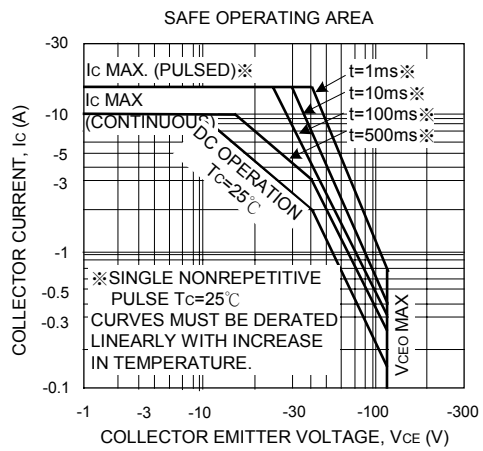
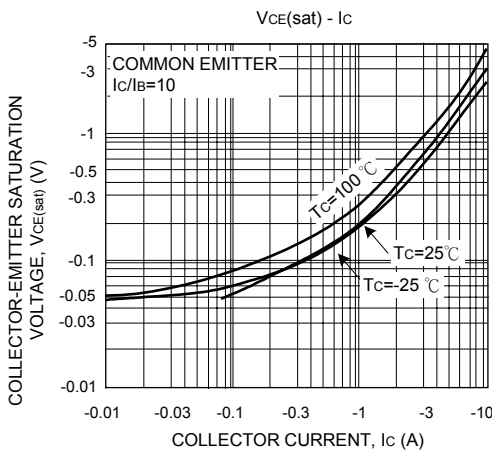
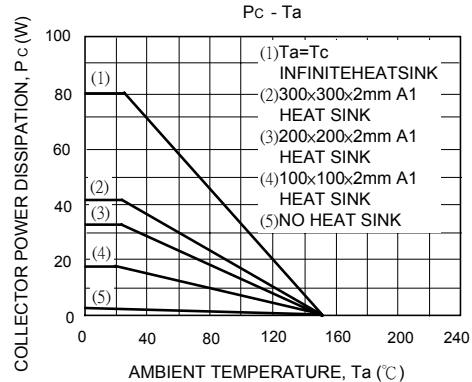
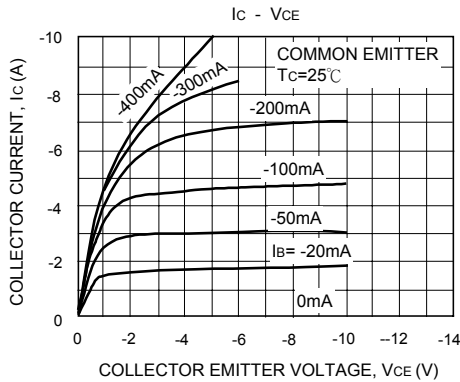
(Ta=25°C)

PARAMETER	SYMBOL	TEST CONDITIONS	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	$h_{FE}$	$V_{CE} = -5V, I_C = -1A$	55		160	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -5A, I_B = -0.5A$			-2.5	V
Base-Emitter Voltage	$V_{BE}$	$V_{CE} = -5A, I_C = -5A$			-1.5	V
Transition Frequency	$f_T$	$V_{CE} = -5A, I_C = -1A$		10		MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB} = -10V, I_E = 0, f = 1MHz$		280		pF

## CLASSIFICATION OF hFE

RANK	R	O
RANGE	55 ~ 110	80 ~ 160

TYPICAL CHARACTERISTICS



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