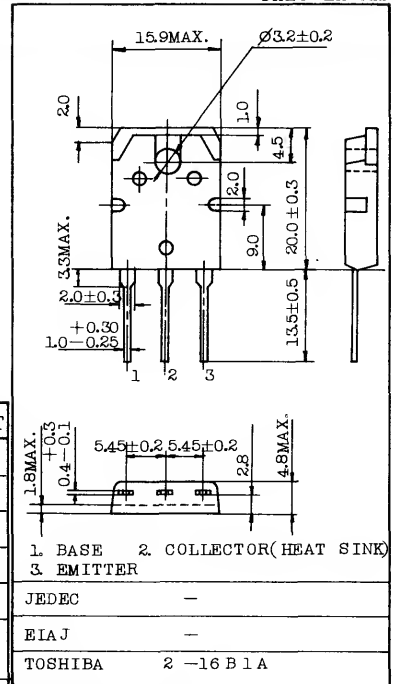


Unit in mm

POWER AMPLIFIER APPLICATIONS.

FEATURES:

- Complementary to 2SB686.
- Recommended for 30 ~ 35W High-Fidelity Audio Frequency Amplifier Output Stage.



MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V <sub>CBO</sub>	100	V
Collector-Emitter Voltage	V <sub>CEO</sub>	100	V
Emitter-Base Voltage	V <sub>EBO</sub>	5	V
Collector Current	I <sub>C</sub>	6	A
Emitter Current	I <sub>E</sub>	-6	A
Collector Power Dissipation (T <sub>c</sub> =25°C)	P <sub>C</sub>	60	W
Junction Temperature	T <sub>j</sub>	150	°C
Storage Temperature Range	T <sub>stg</sub>	-55~150	°C

JEDEC	-
EIAJ	-
TOSHIBA	2-16 B 1 A

Weight : 4.6g

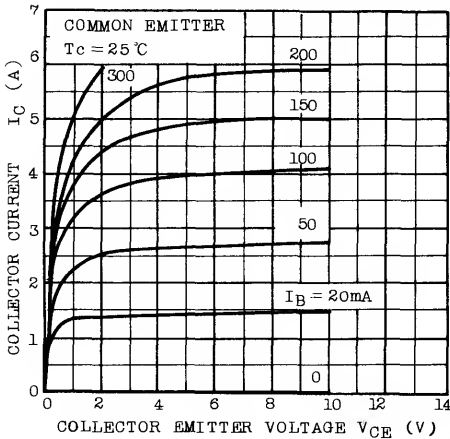
ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I <sub>CBO</sub>	V <sub>CB</sub> =100V, I <sub>E</sub> =0	-	-	10	μA
Emitter Cut-off Current	I <sub>EBO</sub>	V <sub>EB</sub> =5V, I <sub>C</sub> =0	-	-	10	μA
Collector-Emitter Breakdown Voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> =50mA, I <sub>B</sub> =0	100	-	-	V
Emitter-Base Breakdown Voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> =10mA, I <sub>C</sub> =0	5	-	-	V
DC Current Gain	h <sub>FE</sub> (Note)	V <sub>CE</sub> =5V, I <sub>C</sub> =1A	55	-	160	
Collector-Emitter Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =4A, I <sub>B</sub> =0.4A	-	-	2.0	V
Base-Emitter Voltage	V <sub>BE</sub>	V <sub>CE</sub> =5V, I <sub>C</sub> =4A	-	-	1.5	V
Transition Frequency	f <sub>T</sub>	V <sub>CE</sub> =5V, I <sub>C</sub> =1A	-	12	-	MHz
Collector Output Capacitance	C <sub>ob</sub>	V <sub>CB</sub> =10V, I <sub>E</sub> =0, f=1MHz	-	100	-	pF

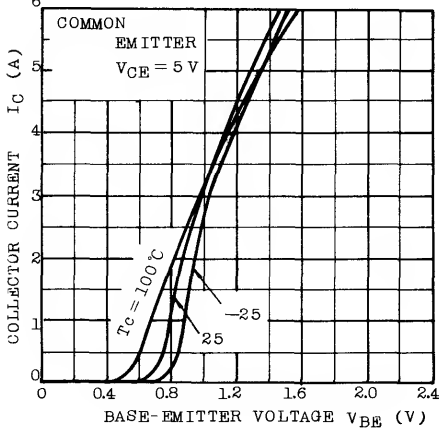
Note : h<sub>FE</sub> Classification R : 55~110, O : 80~160

# 2SD716

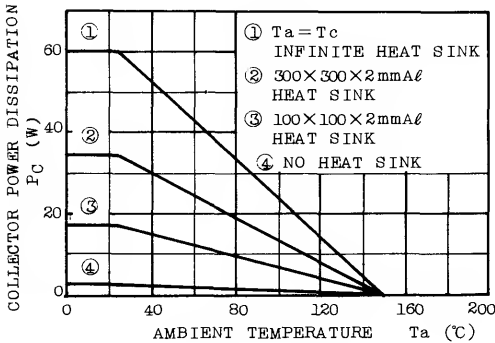
$I_C - V_{CE}$  (LOW VOLTAGE REGION)



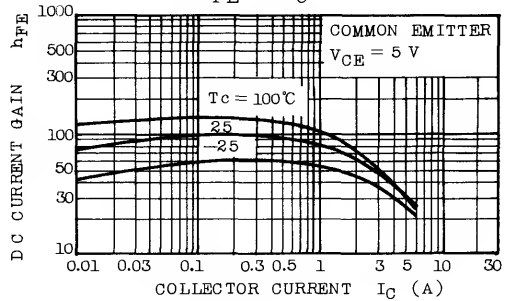
$I_C - V_{BE}$



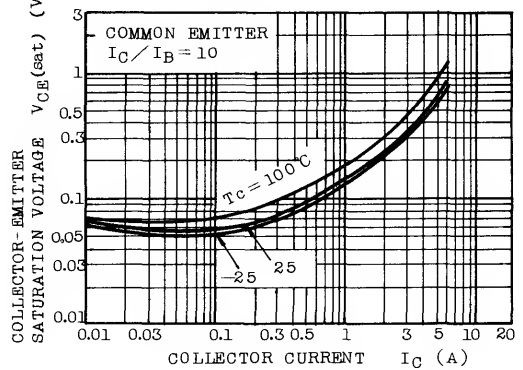
$P_C - T_a$



$h_{FE} - I_C$



$V_{CE(sat)} - I_C$



SAFE OPERATING AREA

