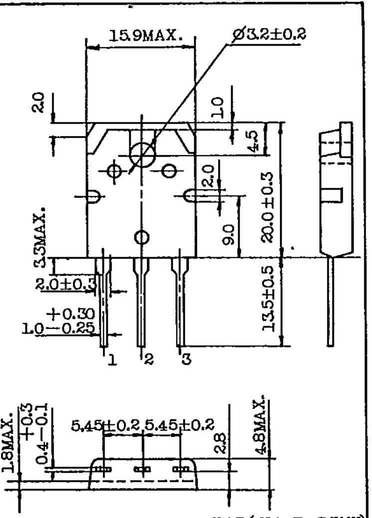
SILICON NPN TRIPLE DIFFUSED TYPE

2SD716

Unit in mm



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

JEDEC	—
EIAJ	—
TOSHIBA	2−16B1A

Weight : 4.6g

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_{CBO}	100	V
Collector-Emitter Voltage	V_{CEO}	100	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	6	A
Emitter Current	I_E	-6	A
Collector Power Dissipation (Tc=25°C)	P_C	60	W
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55∿150	°C

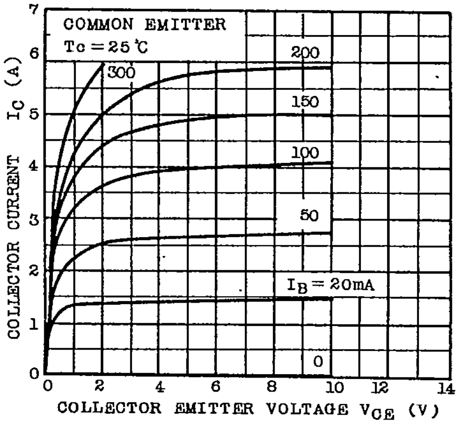
ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	V_{CB}=100V, 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	100	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	I_E=10mA, I_C=0	5	-	-	V
DC Current Gain	h_{FE} (Note)	V_{CE}=5V, I_C=1A	55	-	160	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=4A, I_B=0.4A	-	-	2.0	V
Base-Emitter Voltage	V_{BE}	V_{CE}=5V, I_C=4A	-	-	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	-	100	-	pF

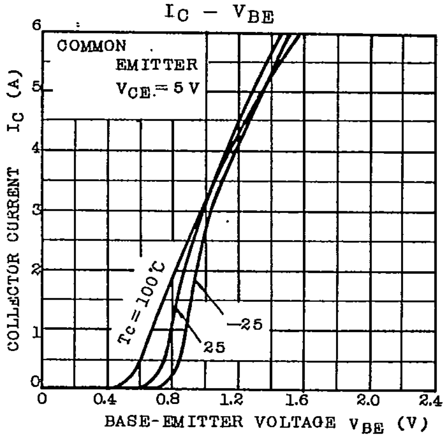
Note : h_{FE} Classification R : 55∿110, O : 80∿160

2SD716

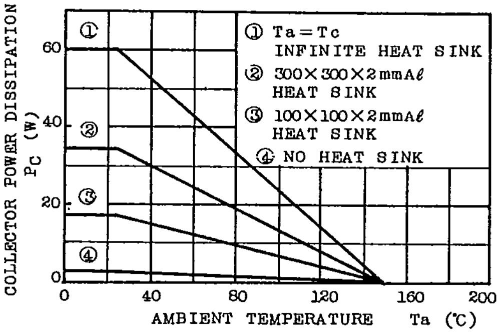
I_C – V_{CE} (LOW VOLTAGE REGION)



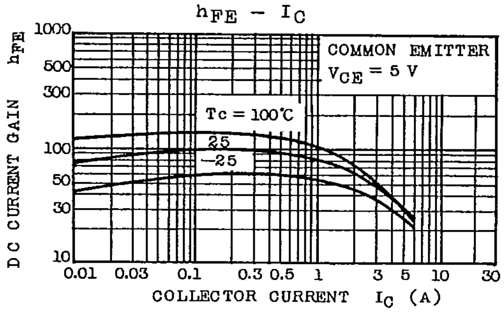
I_C – V_{BE}



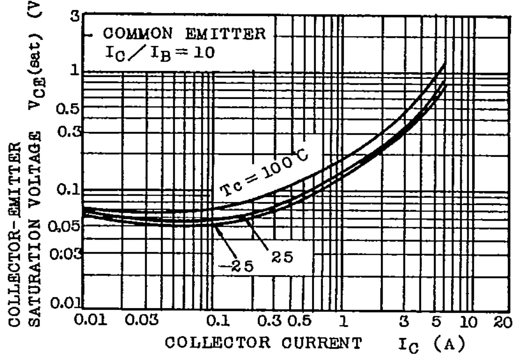
P_C – Ta



h_{FE} – I_C



$V_{CE(sat)}$ – I_C



SAFE OPERATING AREA