2SB595

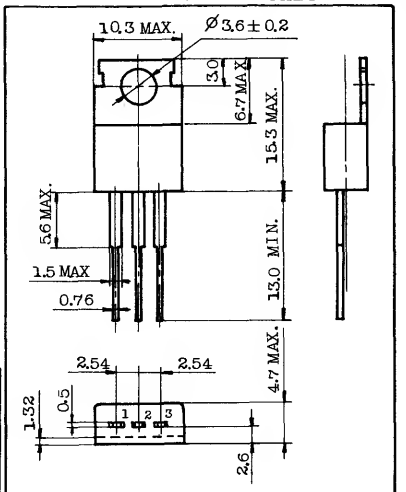
SILICON PNP TRIPLE DIFFUSED TYPE (PCT PROCESS)

POWER AMPLIFIER APPLICATIONS.

FEATURES:

- High Breakdown Voltage : V_{CEO}=-100V
- Low Collector-Emitter Saturation Voltage : $V_{CE(sat)}$=-2.0V(Max.)
- Complementary to 2SD525.
- Recommended for 30W High-Fidelity Audio Frequency Amplifier Output Stage.

Unit in mm



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

JEDEC	TO-220AB
EIAJ	SC-46
TOSHIBA	2-10A1A

Mounting Kit No. AC75
Weight : 1.9g

MAXIMUM RATINGS (Ta=25°C)

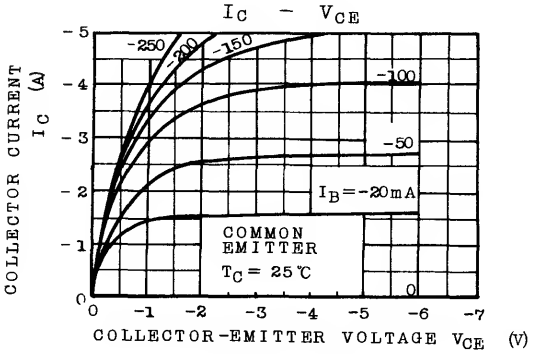
CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	-100	V
Collector-Emitter Voltage	V_{CEO}	-100	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-5	A
Emitter Current	I_E	5	A
Base Current	I_B	-4	A
Collector Power Dissipation (T_C=25°C)	P_C	40	W
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55 ∿150	°C

ELECTRICAL CHARACTERISTICS (Ta=25°C)

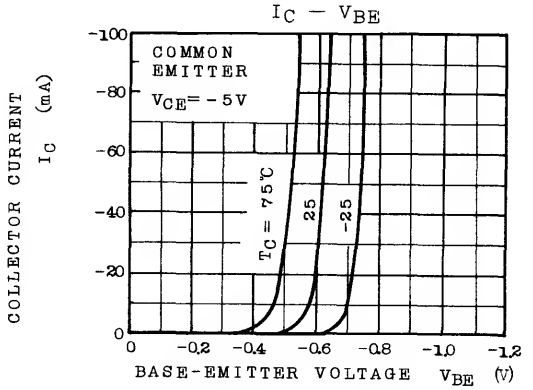
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	V_{CB}=-100V, I_E=0	-	-	-100	μA
Emitter Cut-off Current	I_{EBO}	V_{EB}=-5V, I_C=0	-	-	-1	mA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=-50mA, I_B=0	-100	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	I_E=-10mA, I_C=0	-5	-	-	V
DC Current Gain	$h_{FE(1)}$ (Note)	V_{CE}=-5V, I_C=-1A	40	-	240	
	$h_{FE(2)}$	V_{CE}=-5V, I_C=-4A	20	-	-	
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	-	5	-	MHz
Collector Output Capacitance	C_{ob}	V_{CB}=-10V, I_E=0, f=1MHz	-	270	-	pF

Note : $h_{FE(1)}$ Classification R : 40 ∿ 80, O : 70 ∿ 140, Y : 120 ∿ 240

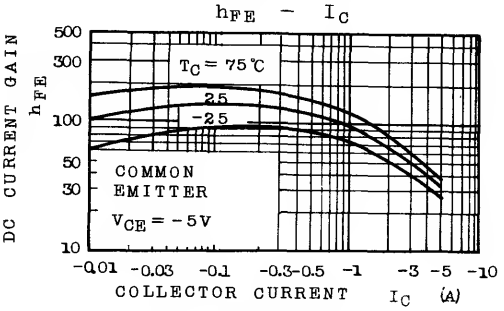
I_C – V_{CE}



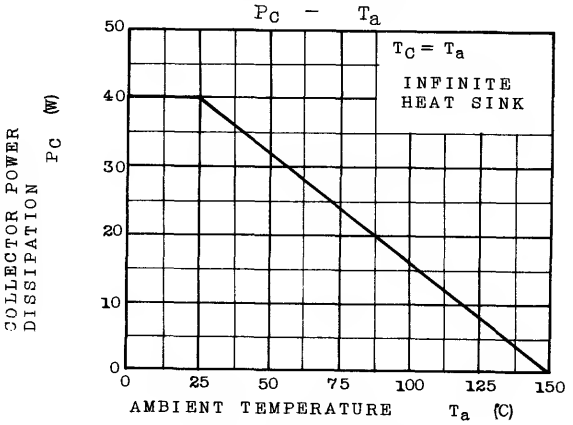
I_C – V_{BE}



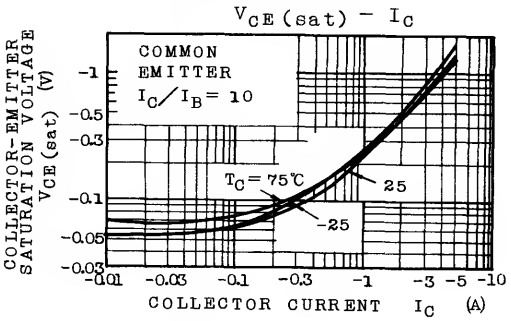
h_{FE} – I_C



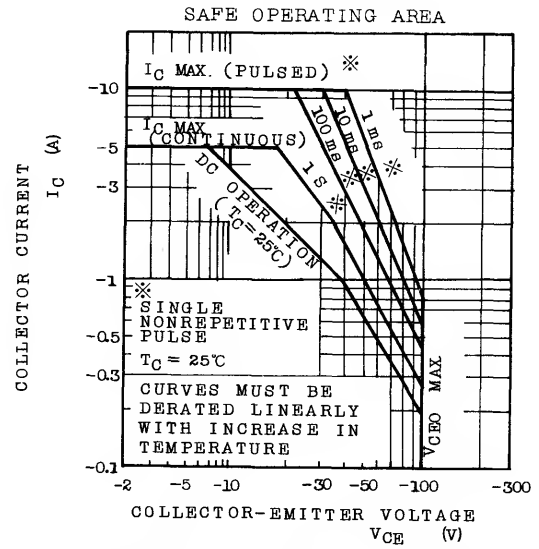
P_C – T_a



$V_{CE(sat)}$ – I_C



SAFE OPERATING AREA



I_C – V_{BE}