2SB554

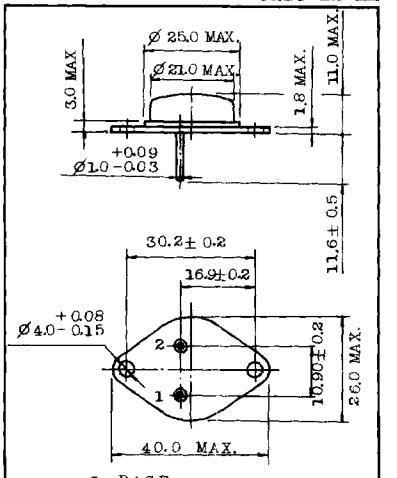
SILICON PNP TRIPLE DIFFUSED MESA TYPE

POWER AMPLIFIER APPLICATIONS.

FEATURES:

- High Power Dissipation : P_C = 150W
- High Breakdown Voltage : V_{CEO} = -180V
- Complementary to 2SD424.
- Recommended for 100W High-Fiderity Audio Frequency Amplifier Output Stage.

Unit in mm



1. BASE
2. EMITTER
COLLECTOR (CASE)

JEDEC	TO-3
EIAJ	TC-3, TB-3
TOSHIBA	2-21A1A

Mounting Kit No. AC73
Weight : 12.9g

MAXIMUM RATINGS (Ta=25°C)

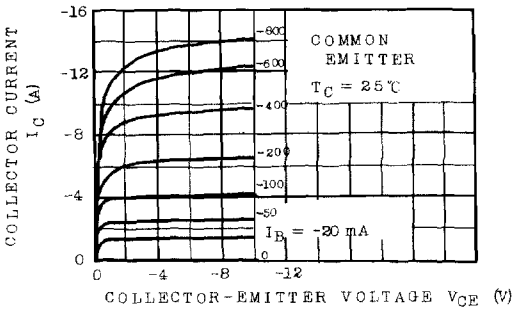
CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	-180	V
Collector-Emitter Voltage	V_{CEO}	-180	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-15	A
Emitter Current	I_E	15	A
Collector Power Dissipation (Tc = 25°C)	P_C	150	W
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-65 ∿ 150	°C

ELECTRICAL CHARACTERISTICS (Ta=25°C)

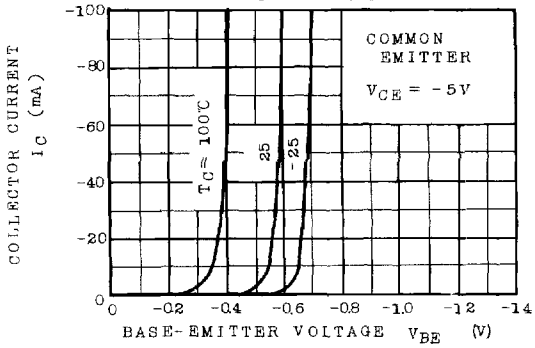
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	V_{CB}=-90V, I_E=0	-	-	-100	μA
Emitter Cut-off Current	I_{EBO}	V_{EB}=-5V, I_C=0	-	-	-100	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=-0.1A, I_B=0	-180	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	I_E=-10mA, I_C=0	-5	-	-	V
DC Current Gain	h_{FE} (Note)	V_{CE}=-5V, I_C=-2A	40	-	140	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=-10A, I_B=-1A	-	-	-3.0	V
Base-Emitter Voltage	V_{BE}	V_{CE}=-5V, I_C=-10A	-	-	-2.5	V
Transition Frequency	f_T	V_{CE}=-5V, I_C=-2A	-	6	-	MHz
Collector Output Capacitance	C_{ob}	V_{CB}=-10V, I_E=0, f=1MHz	-	450	-	pF

Note: h_{FE} Classification R : 40 ∿ 80, O : 70 ∿ 140

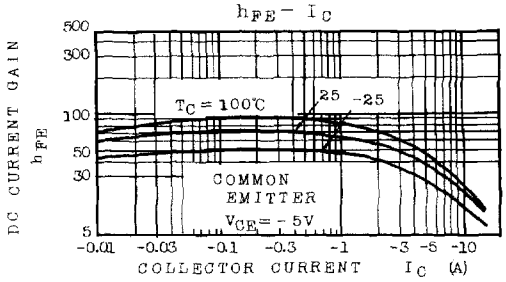
$I_C - V_{CE}$



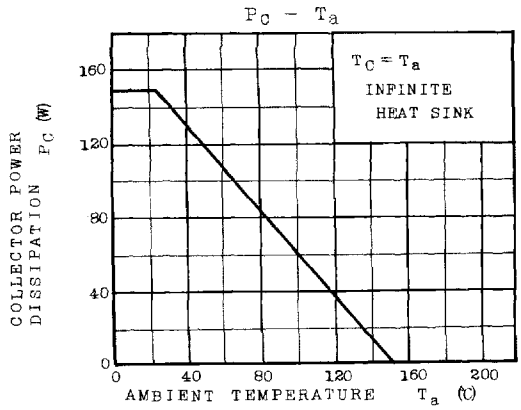
$I_C - V_{BE}$



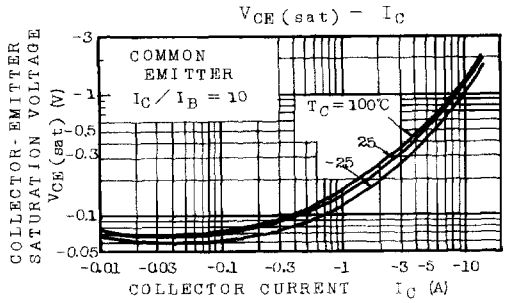
$h_{FE} - I_C$



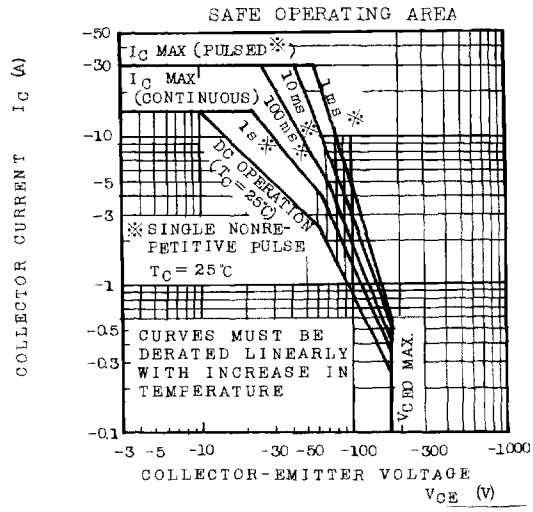
$P_C - T_a$



$V_{CE(sat)} - I_C$



SAFE OPERATING AREA



$I_C - V_{BE}$