SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

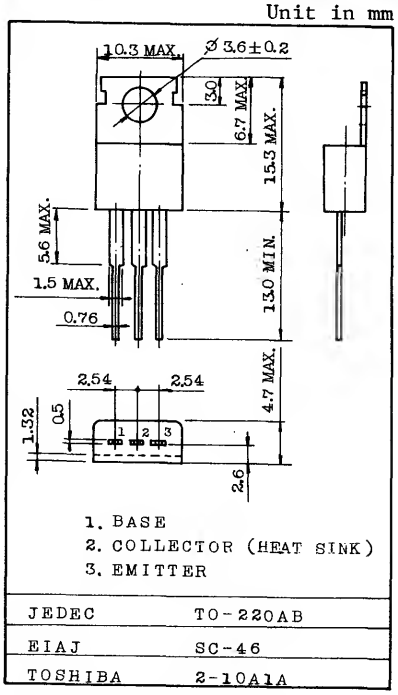
2SA968
2SA968A
2SA968B

POWER AMPLIFIER APPLICATIONS.
DRIVER STAGE AMPLIFIER APPLICATIONS.

FEATURES:

- High Transition Frequency: f_T=100MHz (Typ.)
- Complementary to 2SC2238, 2SC2238A, and 2SC2238B

Unit in mm



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

Mounting Kit No. AC75
Weight : 1.9g

MAXIMUM RATINGS (Ta=25°C)

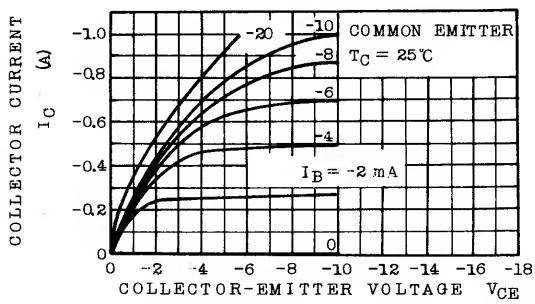
CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage	2SA968	V_{CBO}	-160	V
	2SA968A		-180	
	2SA968B		-200	
Collector-Emitter Voltage	2SA968	V_{CEO}	-160	V
	2SA968A		-180	
	2SA968B		-200	
Emitter-Base Voltage		V_{EBO}	-5	V
Collector Current		I_C	-1.5	A
Emitter Current		I_E	1.5	A
Collector Power Dissipation (Tc=25°C)		P_C	25	W
Junction Temperature		T_j	150	°C
Storage Temperature Range		T_{stg}	-55∿150	°C

ELECTRICAL CHARACTERISTICS (Ta=25°C)

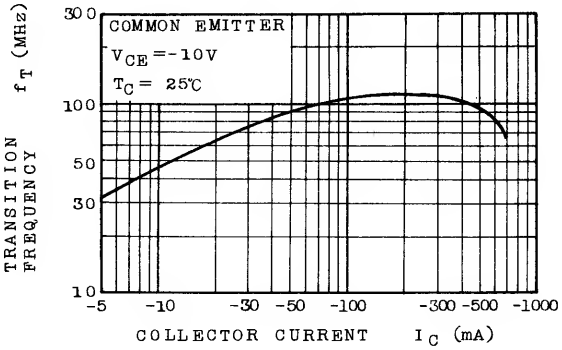
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I_{CBO}	V_{CB}=-160V, I_E=0	-	-	-1.0	μA
Emitter Cut-off Current		I_{EBO}	V_{EB}=-5V, I_C=0	-	-	-1.0	μA
Collector-Emitter Breakdown Voltage	2SA968	$V_{(BR)CEO}$	I_C=-10mA, I_B=0	-160	-	-	V
	2SA968A			-180	-	-	
	2SA968B			-200	-	-	
Emitter-Base Breakdown Voltage		$V_{(BR)EBO}$	I_E=-1mA, I_C=0	-5	-	-	V
DC Current Gain		h_{FE} (Note)	V_{CE}=-5V, I_C=-100mA	70	-	240	
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$	I_C=-500mA, I_B=-50mA	-	-	-1.5	V
Base-Emitter Voltage		V_{BE}	V_{CE}=-5V, I_C=-500mA	-	-	-1.0	V
Transition Frequency		f_T	V_{CE}=-10V, I_C=-100mA	-	100	-	MHz
Collector Output Capacitance		C_{ob}	V_{CB}=-10V, I_E=0, f=1MHz	-	30	-	pF

Note: hFE Classification O: 70∿140, Y: 120∿240

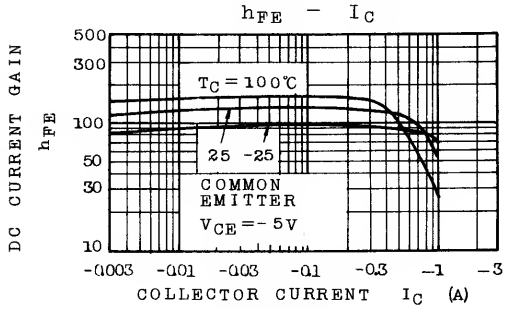
I_C – V_{CE}



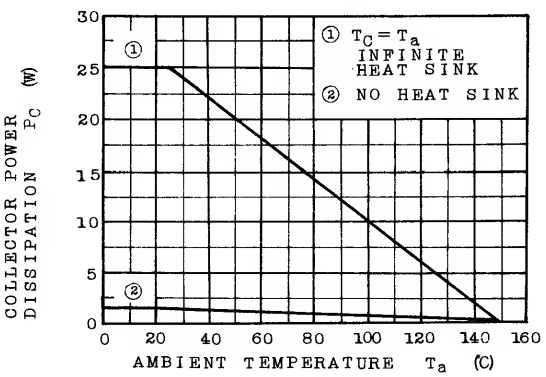
f_T – I_C



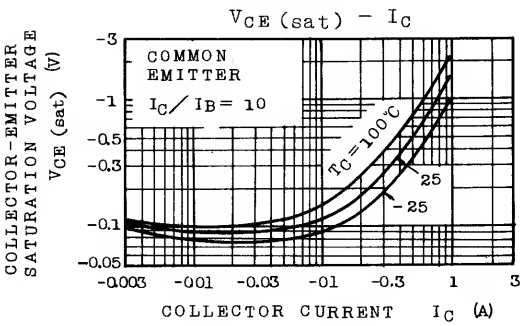
h_{FE} – I_C



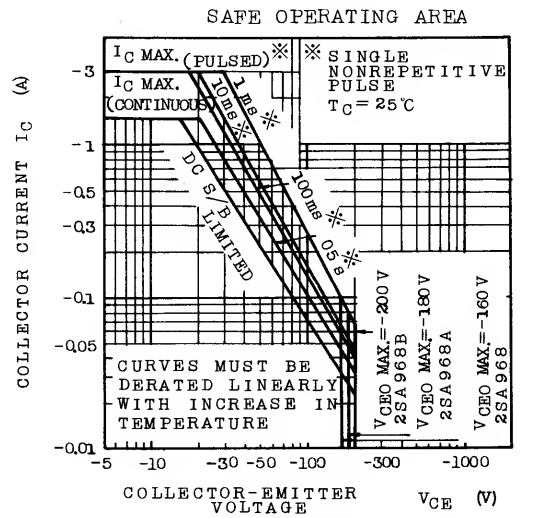
P_C – T_a



$V_{CE\,(sat)}$ – I_C



SAFE OPERATING AREA



I_C – V_{BE}