2SA490

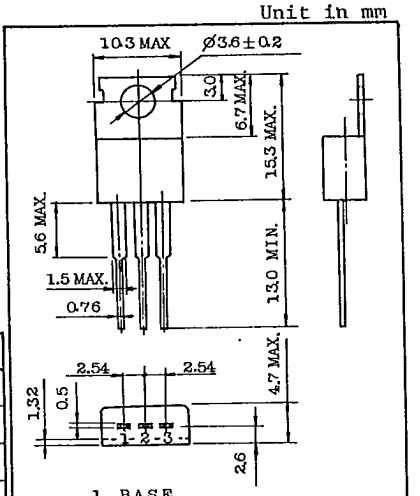
SILICON PNP TRIPLE DIFFUSED TYPE

POWER AMPLIFIER APPLICATIONS.

FEATURES:

- Complementary to 2SC790.
- 10 Watts Output Applications.

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	V_{CBO}	-50	V
Collector-Emitter Voltage	V_{CEO}	-40	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-3	A
Emitter Current	I_E	3	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}=-30V, I_E=0	-	-	-10	μA
Emitter Cut-off Current	I_{EBO}	V_{EB}=-5V, I_C=0	-	-	-100	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=-50mA, I_B=0	-40	-	-	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}=-2V, I_C=-0.5A	40	-	240	
	$h_{FE(2)}$	V_{CE}=-2V, I_C=-2A	13	50	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=-2A, I_B=-0.2A	-	-0.45	-1.2	V
Base-Emitter Voltage	V_{BE}	V_{CE}=-2V, I_C=-2A	-	-0.85	-1.8	V
Transition Frequency	f_T	V_{CE}=-2V, I_C=-0.5A	3	10	-	MHz
Collector Output Capacitance	C_{ob}	V_{CB}=-10V, I_E=0, f=1MHz	-	150	-	pF

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

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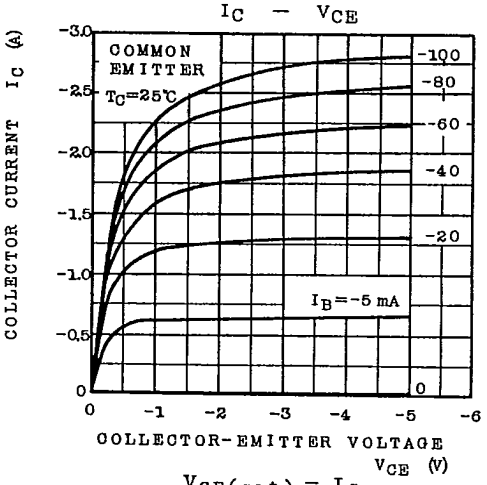
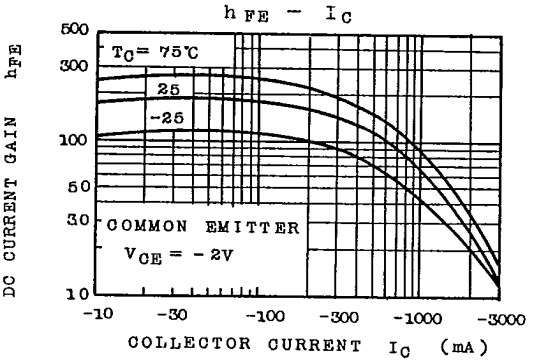
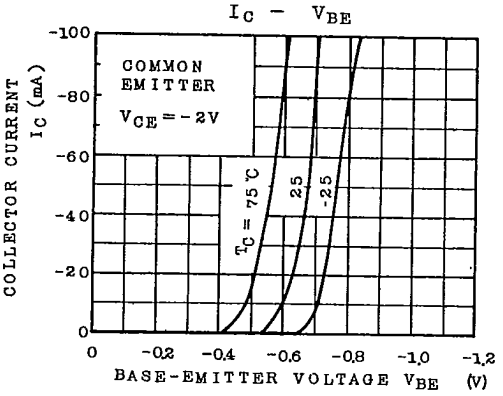
I_C — V_{CE}



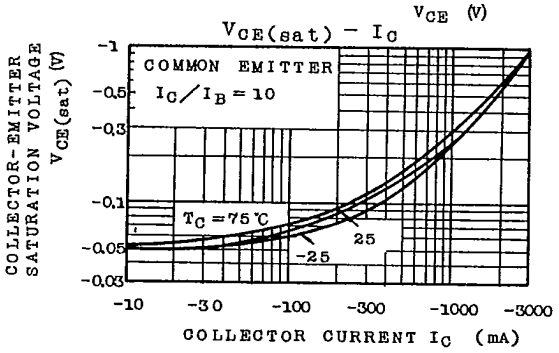
h_{FE} — I_C



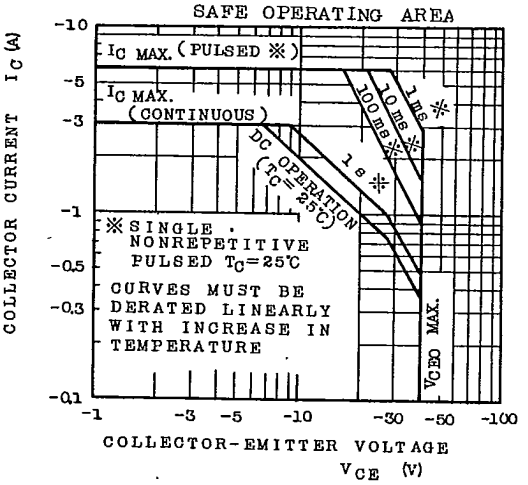
I_C — V_{BE}



$V_{CE(sat)}$ — I_C



SAFE OPERATING AREA



P_C — T_a