SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

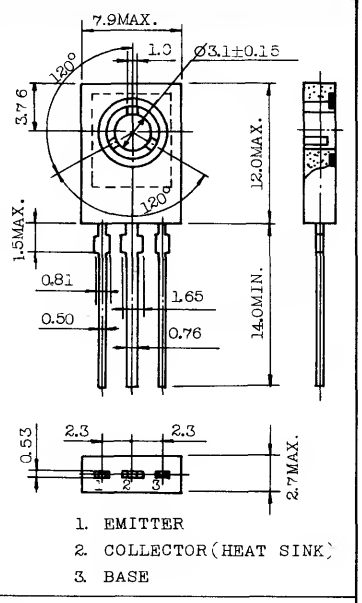
2SA496
2SA505

MEDIUM POWER AMPLIFIER APPLICATIONS.

FEATURES:

- Low Collector Saturation Voltage
  : $V_{CE(sat)}$=-0.32V (Typ.)
- Complementary to 2SC495 and 2SC496.

Unit in mm



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

JEDEC	TO — 126
EIAJ	—
TOSHIBA	2 — 8F1A

Mounting Kit No. AC46C
Weight : 0.72g

MAXIMUM RATINGS (Ta=25°C)

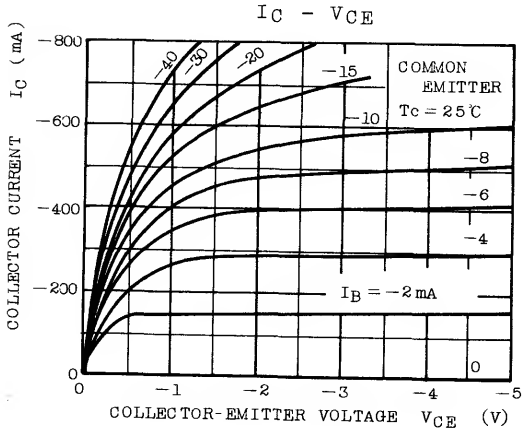
CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage	2SA505	V_{CBO}	-60	V
	2SA496		-40	
Collector-Emitter Voltage	2SA505	V_{CEO}	-50	V
	2SA496		-30	
Emitter-Base Voltage		V_{EBO}	-5	V
Collector Current		I_C	-1	A
Emitter Current		I_E	1	A
Collector Power Dissipation		P_C	1	W
Junction Temperature		T_j	150	°C
Storage Temperature Range		T_{stg}	-55∼150	°C

ELECTRICAL CHARACTERISTICS (Ta=25°C)

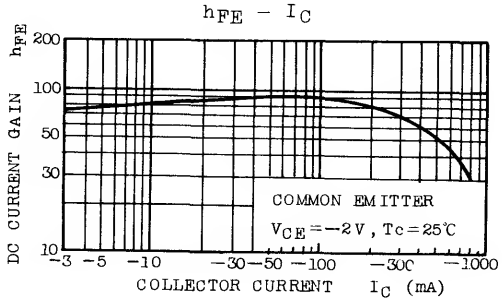
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I_{CBO}	V_{CB}=-30V, I_E=0	-	-	-1	μA
Emitter Cut-off Current		I_{EBO}	V_{EB}=-5V, I_C=0	-	-	-1	μA
Collector-Emitter Breakdown Voltage	2SA505	$V_{(BR)CEO}$	I_C=-10mA, I_B=0	-50	-	-	V
	2SA496			-30	-	-	
Emitter-Base Breakdown Voltage		$V_{(BR)EBO}$	I_E=1mA, I_C=0	-5	-	-	V
DC Current Gain		(Note) $h_{FE(1)}$	V_{CE}=-2V, I_C=-50mA	40	-	240	
		$h_{FE(2)}$	V_{CE}=-2V, I_C=-800mA	13	-	-	
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$	I_C=-500mA, I_B=-50mA	-	-0.32	-0.8	V
Base-Emitter Voltage		V_{BE}	V_{CE}=-2V, I_C=-500mA	-	-	-1.3	V
Transition Frequency		f_T	V_{CE}=-10V, I_C=-10mA	50	100	-	MHz
Collector Output Capacitance		C_{ob}	V_{CB}=-10V, I_E=0, f=1MHz	-	20	-	pF

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

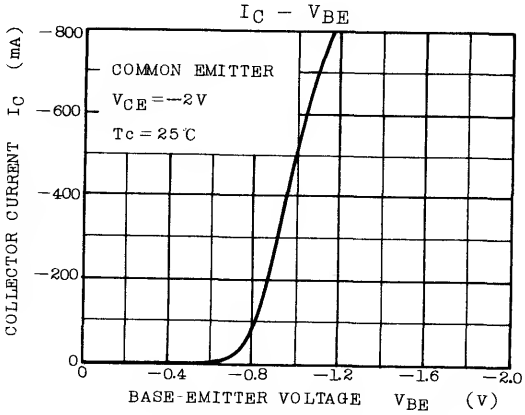
I_C - V_{CE}



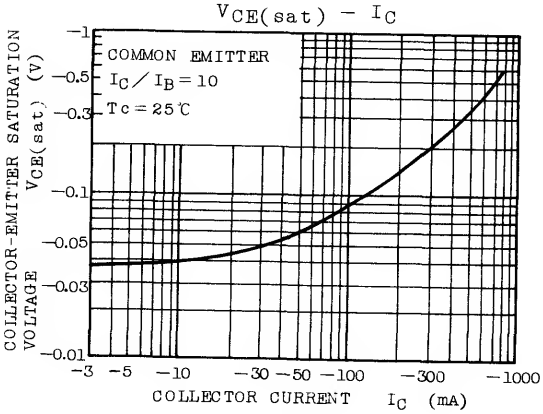
h_{FE} - I_C



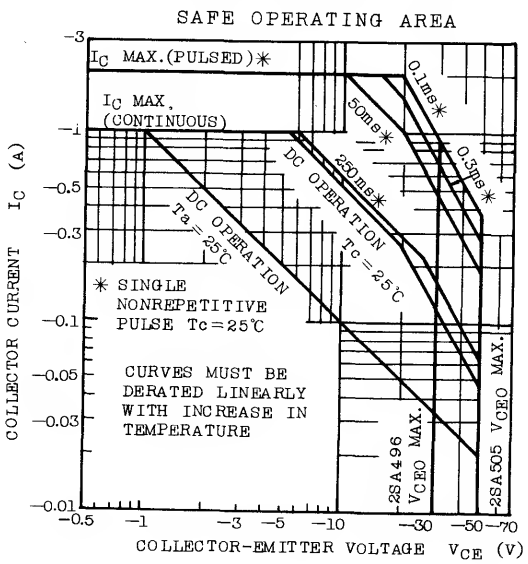
I_C - V_{BE}



$V_{CE(sat)}$ - I_C



SAFE OPERATING AREA



P_C - Ta