2SA1120

SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

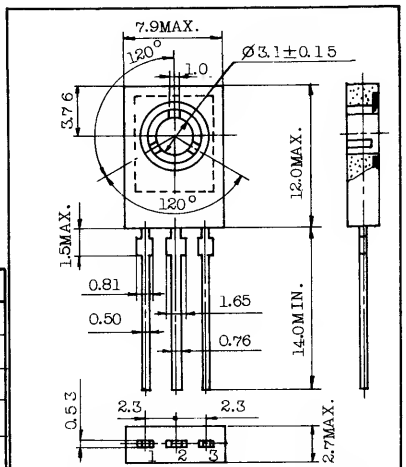
STROBO FLASH APPLICATIONS.

AUDIO POWER AMPLIFIER APPLICATIONS.

FEATURES:

- MIN h_{FE} of 70 at-2V, -4A.
- -5A Rated Collector Current.
- MAX $V_{CE(sat)}$ of -1.0V at -4A I_C.
- 10W at 25°C Case Temperature.

Unit in mm



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		V_{CBO}	-35	V
Collector-Emitter Voltage		V_{CEO}	-20	V
Emitter-Base Voltage		V_{EBO}	-8	V
Collector Current	DC	I_C	-5	A
	Pulsed(Note 1)	I_{CP}	-8	A
Emitter Current	DC	I_E	5	A
	Pulsed(Note 1)	I_{EP}	8	A
Collector Power Dissipation	Ta=25°C	P_C	1.0	W
	Tc=25°C		10	W
Junction Temperature		T_j	150	°C
Storage Temperature Range		T_{stg}	-55∿150	°C

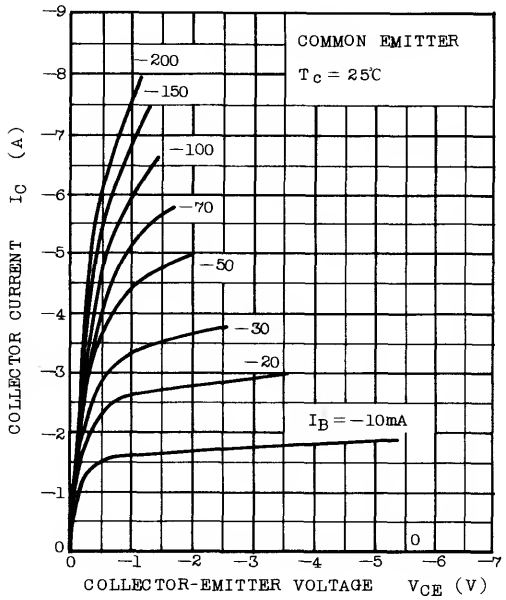
Note 1. Pulse Test : Pulse Width=10ms(Max.), Duty Cycle=30%(Max.)

ELECTRICAL CHARACTERISTICS (Ta=25°C)

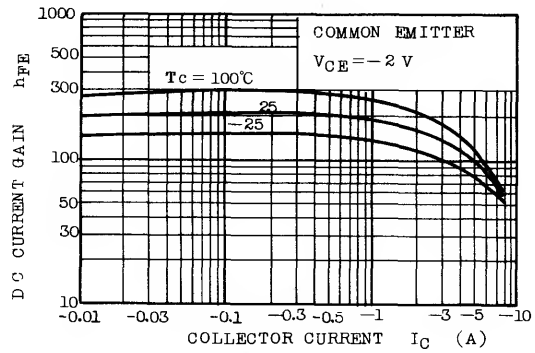
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	V_{CB}=-35V, I_E=0	–	–	-100	nA
Emitter Cut-off Current	I_{EBO}	V_{EB}=-8V, I_C=0	–	–	-100	nA
Collector-Emitter Breakdown Boltage	V_{CEO}	I_C=-10mA, I_B=0	-20	–	–	V
Emitter-Base Breakdown Voltage	V_{EBO}	I_E=-1mA, I_C=0	-8	–	–	V
DC Current Gain	$h_{FE(1)}$ (Note 2)	V_{CE}=-2V, I_C=-0.5A	100	–	320	
	$h_{FE(2)}$	V_{CE}=-2V, I_C=-4A	70	–	–	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=-4A, I_B=-0.1A	–	–	-1.0	V
Base-Emitter Voltage	V_{BE}	V_{CE}=-2V, I_C=-4A	–	–	-1.5	V
Transition Frequency	f_T	V_{CE}=-2V, I_C=-0.5A	–	170	–	MHz
Collector Output Capacitance	C_{ob}	V_{CB}=-10V, I_E=0, f=1MHz	–	62	–	pF

Note 2. $h_{FE(1)}$ Classification 0:100∿200, Y:160∿320

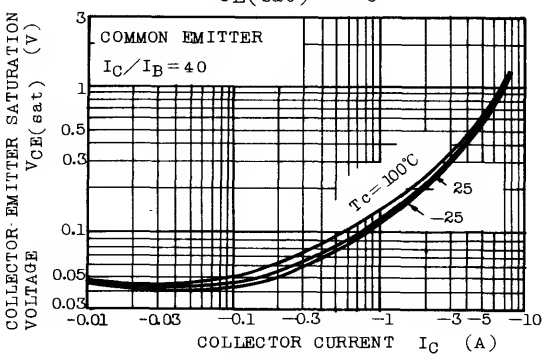
$I_C - V_{CE}$



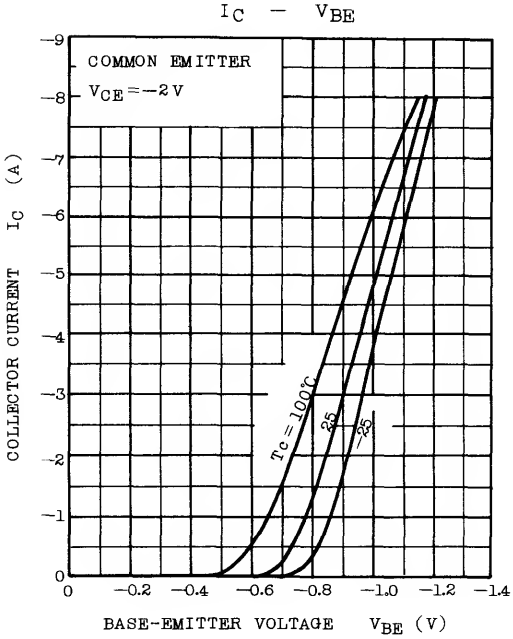
$h_{FE} - I_C$



$V_{CE(sat)} - I_C$



$I_C - V_{BE}$



SAFE OPERATING AREA