

9097250 TOSHIBA (DISCRETE/OPTO)

56C 07258

D 4-33-17

2SA1120

SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

STROBO FLASH APPLICATIONS.

AUDIO POWER AMPLIFIER APPLICATIONS.

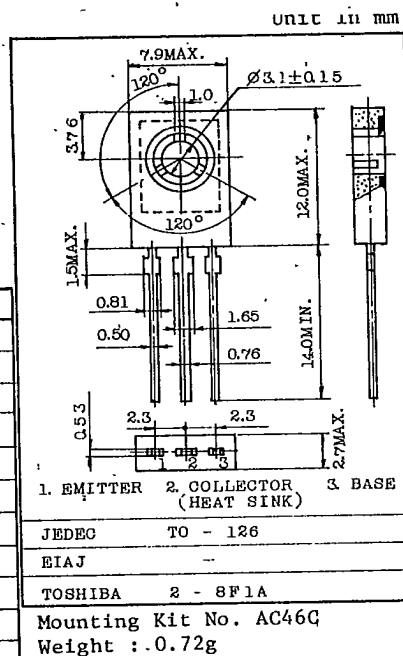
FEATURES:

- 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.

MAXIMUM RATINGS ($T_a=25^\circ\text{C}$)

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	$T_a=25^\circ\text{C}$	P_C	1.0	W
	$T_c=25^\circ\text{C}$		10	W
Junction Temperature		T_j	150	$^\circ\text{C}$
Storage Temperature Range		T_{stg}	-55~150	$^\circ\text{C}$

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

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)

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 Voltage	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

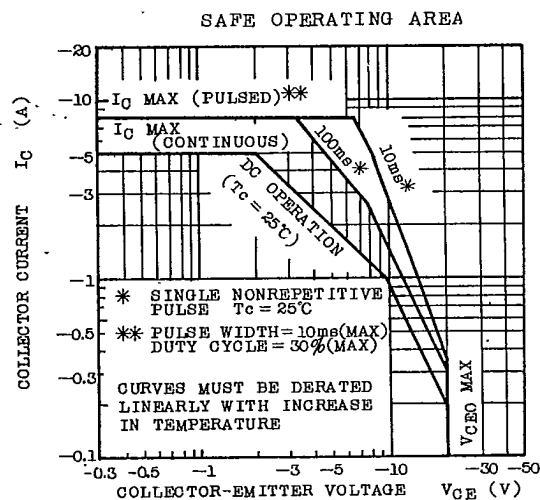
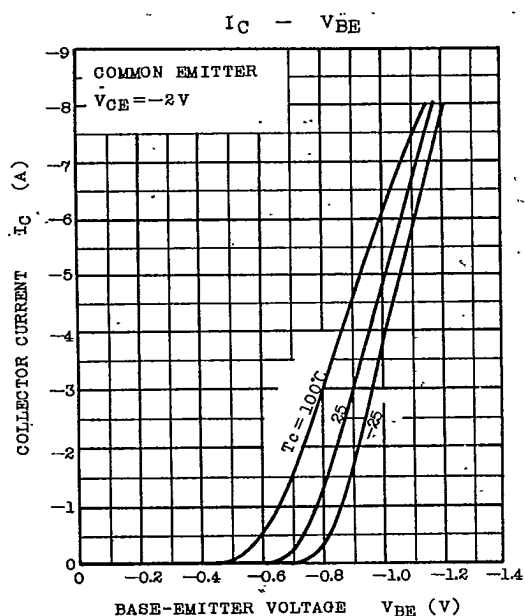
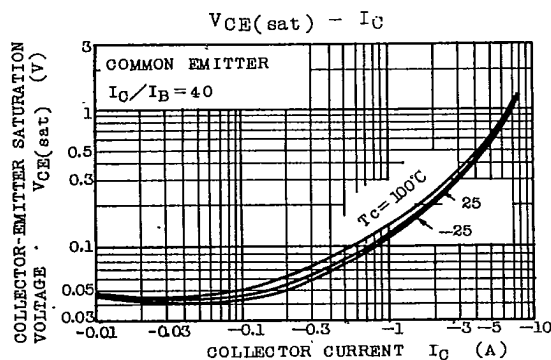
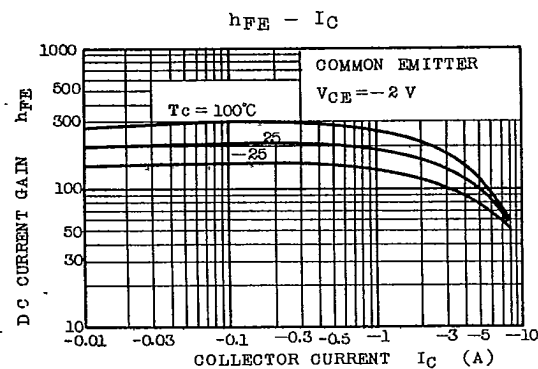
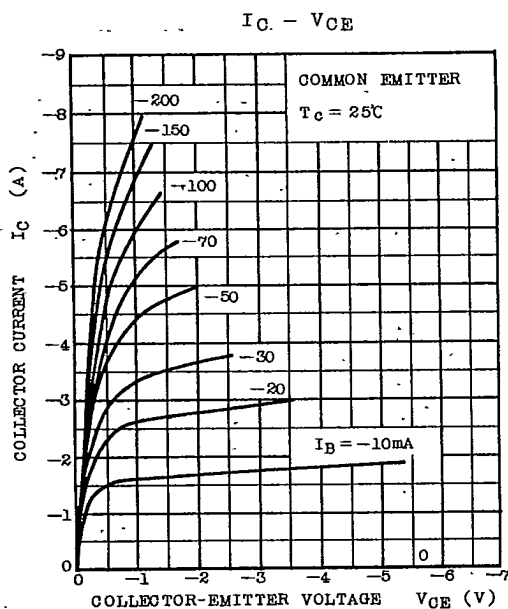
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