

9097250 TOSHIBA (DISCRETE/OPTO)

56C 07703 DT-33-11

**2SC3346**

SILICON NPN EPITAXIAL TYPE (PCT PROCESS)

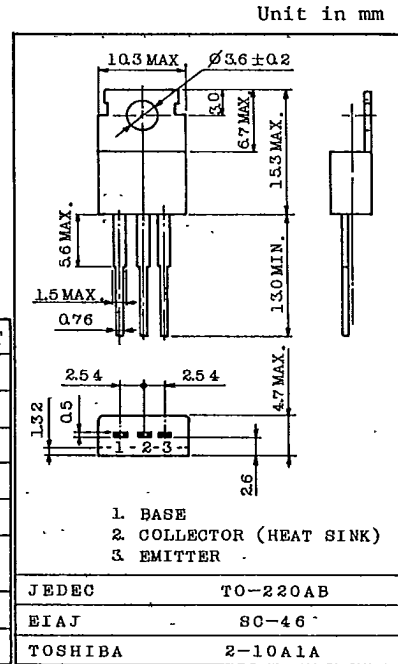
HIGH CURRENT SWITCHING APPLICATIONS.

## FEATURES:

- Low Collector Saturation Voltage  
:  $V_{CE(sat)} = 0.4V$  (Max.) (at  $I_C = 6A$ )
- High Speed Switching Time :  $t_{stg} = 1.0\mu s$  (Typ.)
- Complementary to 2SA1329

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CBO}$	80	V
Collector-Emitter Voltage	$V_{CEO}$	80	V
Emitter-Base Voltage	$V_{EBO}$	6	V
Collector Current	$I_C$	12	A
Base Current	$I_B$	2	A
Collector Power Dissipation ( $T_c = 25^\circ C$ )	$P_C$	40	W
Junction Temperature	$T_j$	150	$^\circ C$
Storage Temperature Range	$T_{stg}$	-55 ~ 150	$^\circ C$

ELECTRICAL CHARACTERISTICS ( $T_a = 25^\circ C$ )Mounting Kit No. AC75  
Weight : 1.9g

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB} = 80V, I_E = 0$	-	-	10	$\mu A$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB} = 6V, I_C = 0$	-	-	10	$\mu A$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 50mA, I_B = 0$	80	-	-	V
DC Current Gain	$h_{FE(1)}$ (Note)	$V_{CE} = 1V, I_C = 1A$	70	-	240	
	$h_{FE(2)}$	$V_{CE} = 1V, I_C = 6A$	40	-	-	
Saturation Voltage	Collector-Emitter	$V_{CE(sat)}$	-	0.2	0.4	V
	Base-Emitter	$V_{BE(sat)}$	-	0.9	1.2	
Transition Frequency	$f_T$	$V_{CE} = 5V, I_C = 1A$	-	80	-	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB} = 10V, I_E = 0, f = 1MHz$	-	220	-	pF
Switching Time	Turn-on Time	$t_{on}$	-	0.2	-	$\mu s$
	Storage Time	$t_{stg}$	-	1.0	-	
	Fall Time	$t_f$	-	0.2	-	

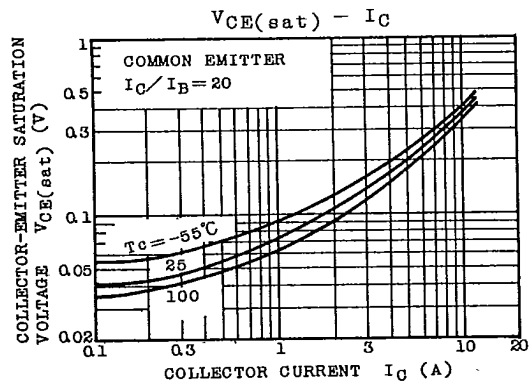
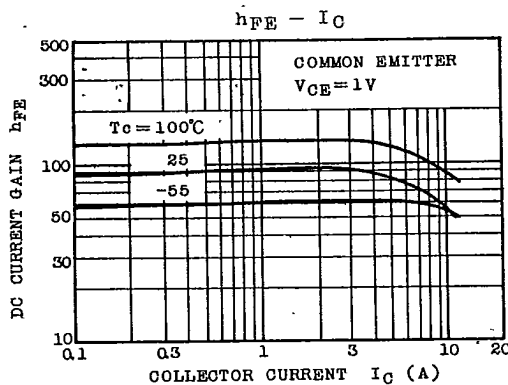
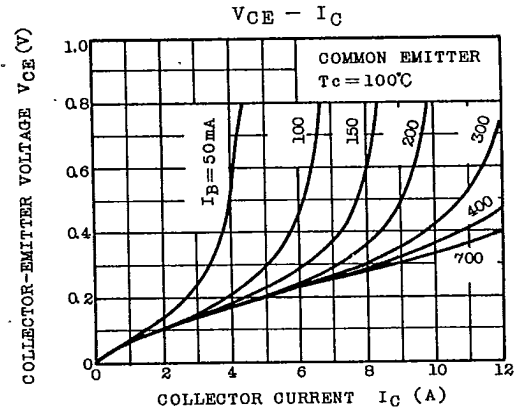
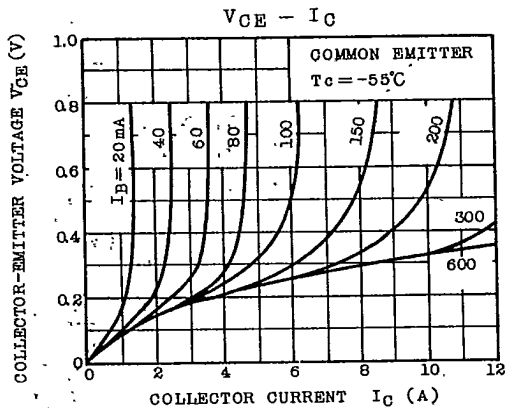
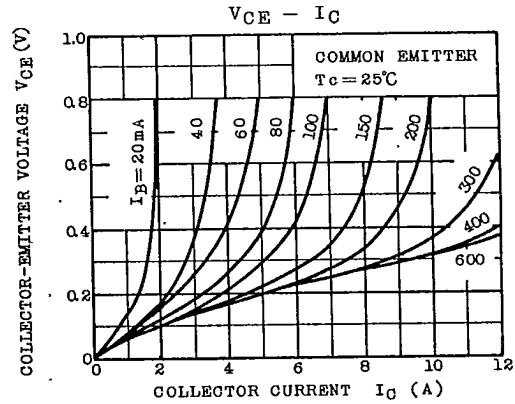
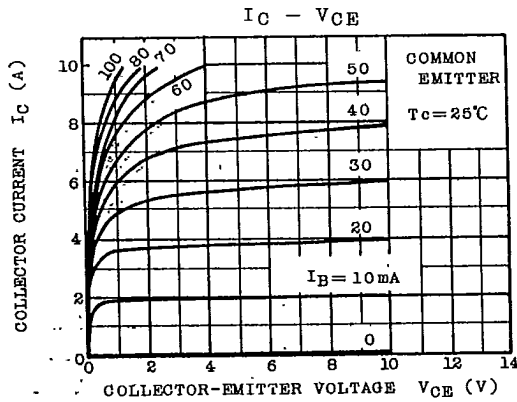
Note :  $h_{FE(1)}$  Classification O : 70 ~ 140, Y : 120 ~ 240

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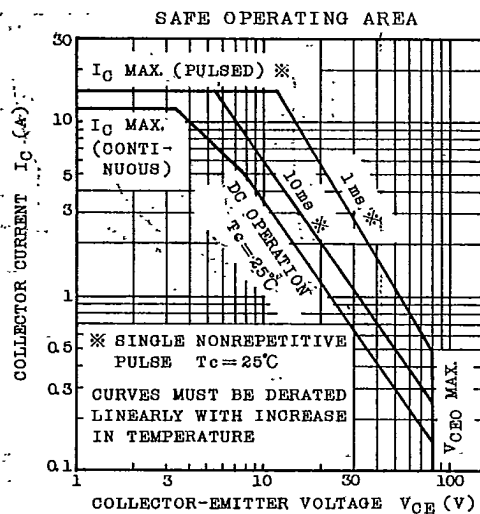
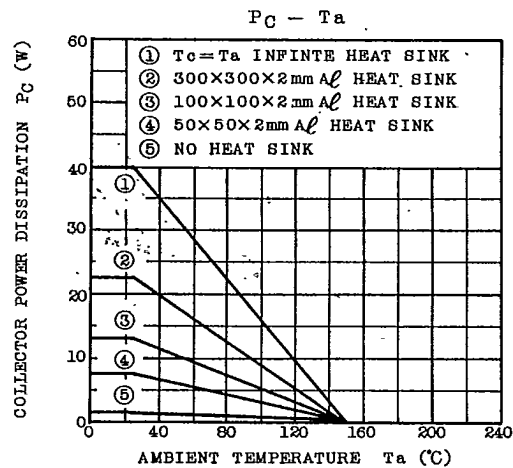
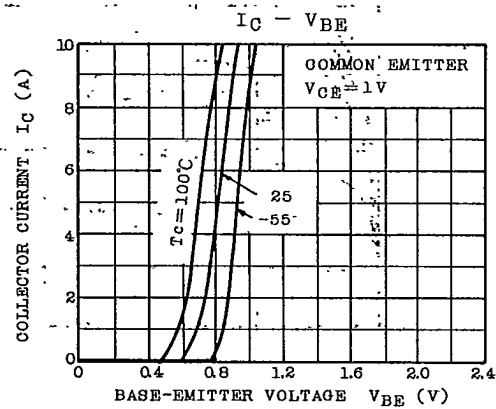
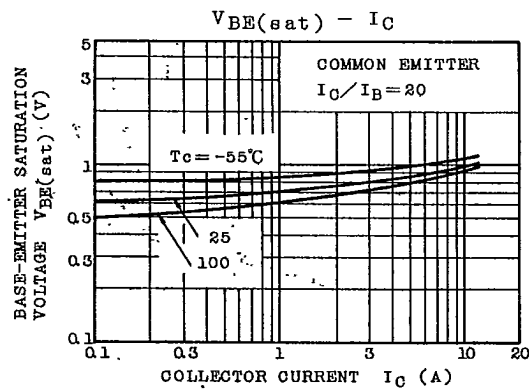
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