SILICON NPN TRIPLE DIFFUSED TYPE

2SC1576

INDUSTRIAL APPLICATIONS

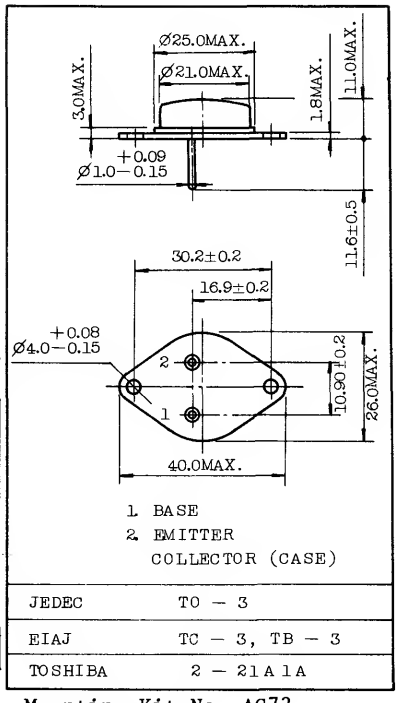
REGULATOR APPLICATIONS.

HIGH VOLTAGE SWITCHING APPLICATIONS.

FEATURES:

- High Voltage : V_{CBO}=450V
- Low Saturation Voltage :
  : $V_{CE(sat)}$= 1.5V (Max.) (I_C=5A, I_B=0.8A)
- High Speed Switching Time : t_{stg}=3.0μs (Typ.)

Unit in mm



JEDEC	TO − 3
EIAJ	TC − 3, TB − 3
TOSHIBA	2 − 21A 1A

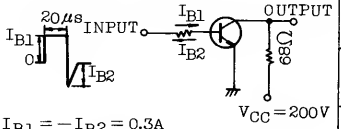
Mounting Kit No. AC73

Weight : 12.9g

MAXIMUM RATINGS (Ta=25°C)

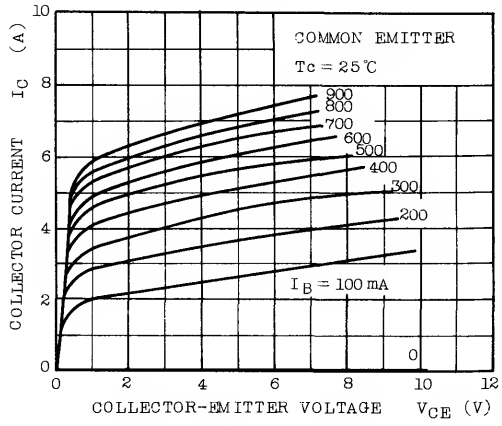
CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	450	V
Collector-Emitter Voltage	V_{CEO}	330	V
Emitter-Base Voltage	V_{EBO}	6	V
Collector Current	I_C	8	A
Base Current	I_B	2	A
Collector Power Dissipation (Tc=25°C)	P_C	100	W
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-65∿150	°C

ELECTRICAL CHARACTERISTICS (Ta=25°C)

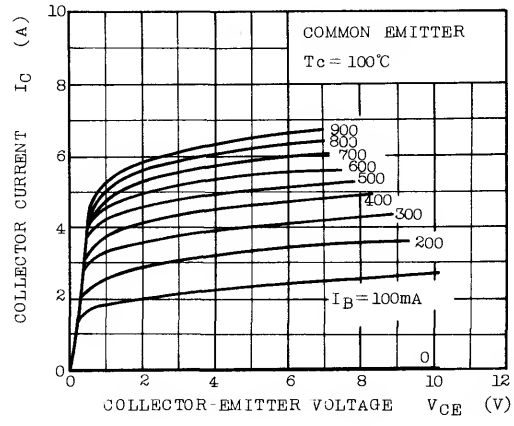
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I_{CBO}	V_{CB}=450V, I_E=0	-	-	100	μA
Emitter Cut-off Current		I_{EBO}	V_{EB}=6V, I_C=0	-	-	1	mA
Collector-Emitter Breakdown Voltage		$V_{(BR)CEO}$	I_C=5mA, I_B=0	330	-	-	V
DC Current Gain		h_{FE}	V_{CE}=5V, I_C=1A	30	-	150	
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$	I_C=5A, I_B=0.8A	-	-	1.5	V
Base-Emitter Saturation Voltage		$V_{BE(sat)}$	I_C=5A, I_B=0.8A	-	-	1.8	V
Switching Time	Turn-on Time	t_{on}		-	1.0	-	μs
	Storage Time	t_{stg}		-	3.0	-	
	Fall Time	t_f		-	0.8	-	

$I_{B1} = -I_{B2} = 0.3A$
DUTY CYCLE≦2%

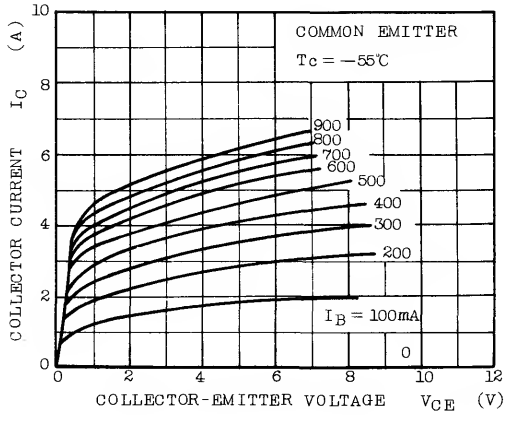
$I_C - V_{CE}$



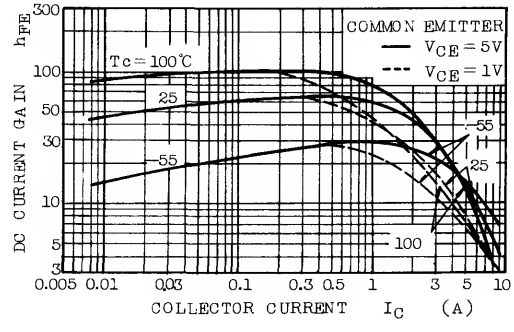
$I_C - V_{CE}$



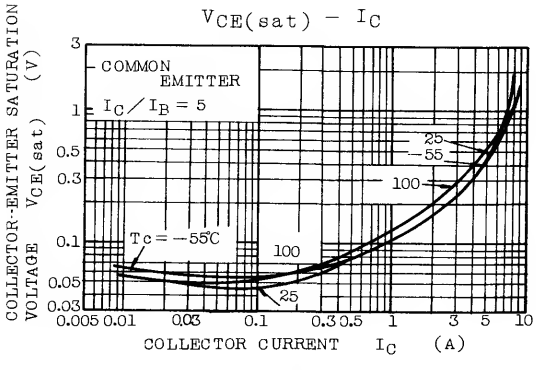
$I_C - V_{CE}$



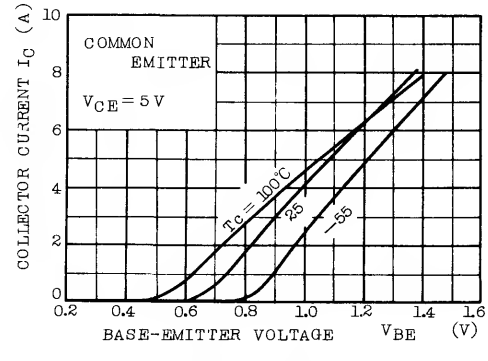
$h_{FE} - I_C$



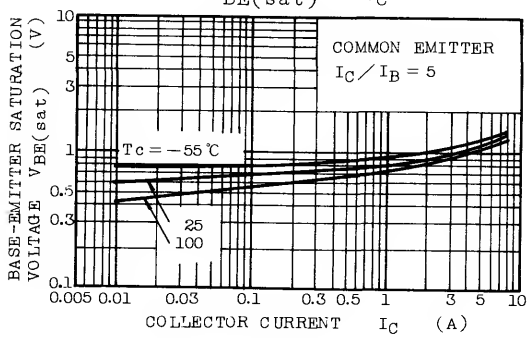
$V_{CE(sat)} - I_C$



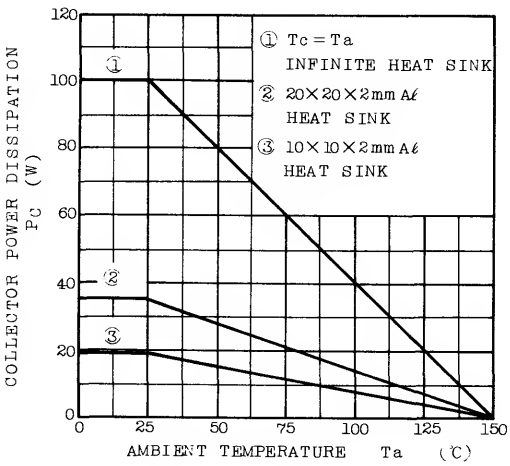
$I_C - V_{BE}$



$V_{BE(sat)}$ – I_C



P_C – Ta



SAFE OPERATING AREA