

9097250 TOSHIBA (DISCRETE/OPTO)

56C 07771 D T-33-35

2SD700SILICON NPN TRIPLE DIFFUSED MESA TYPE
(DARLINGTON POWER)

INDUSTRIAL APPLICATIONS

Unit in mm

HIGH POWER SWITCHING APPLICATIONS.

DC-AC POWER INVERTER APPLICATIONS.

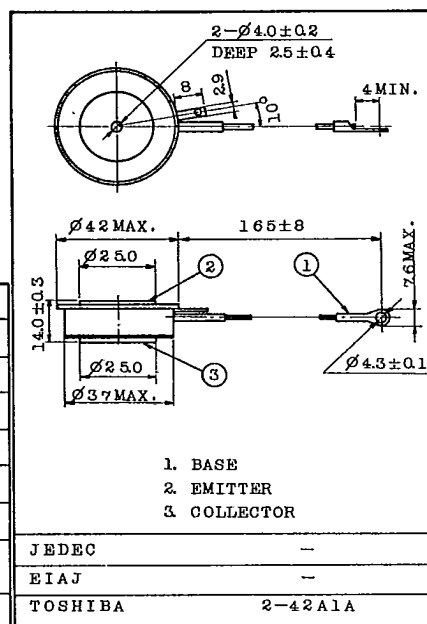
MOTOR CONTROL APPLICATIONS.

FEATURES:

- High Voltage : $V_{CEO(SUS)}=200V$
- Triple Diffused Design.
- Darlington Design.

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector Base Voltage	V_{CBO}	300	V
Collector Emitter Voltage	$V_{CEO(SUS)}$	200	V
Emitter Base Voltage	V_{EBO}	5	V
Collector Current	I_C	200	A
Emitter Current	I_E	-200	A
Base Current	I_B	12	A
Thermal Resistance (Double Side Cooling)	$R_{th(j-c)}$	0.13	$^\circ C/W$
Junction Temperature	T_j	125	$^\circ C$
Storage Temperature Range	T_{stg}	-40~150	$^\circ C$
Mounting Force Required	F	400 $\pm$ 40	kg



Weight : 70g

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
DC Current Gain	h_{FE}	$V_{CE}=5V, I_C=200A$	150	-	-	
		$V_{CE}=5V, I_C=100A$	-	700	-	
Collector-Emitter Sustaining Voltage	$V_{CEO(SUS)}$	$I_C=0.5A, L=40mH$	200	-	-	V
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=200A, I_B=4A$ (Note)	-	-	2.0	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		-	-	2.5	V
Collector Cut-off Current	I_{CBO}	$V_{CB}=300V, I_E=0$	-	-	1.0	mA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5V, I_C=0$	-	-	200	mA
Switching Time	Turn-on Time	$I_C=200A, I_{B1}=4A, -I_{B2}=4A, V_C=100V$	-	1.0	-	μs
	Storage Time		-	4.5	-	μs
	Fall Time		-	8.0	-	μs

Note : Pulse Test; Pulse Width $\leq 300\mu s$, Duty Cycle $\leq 3\%$

Mounting Force; F=400kg

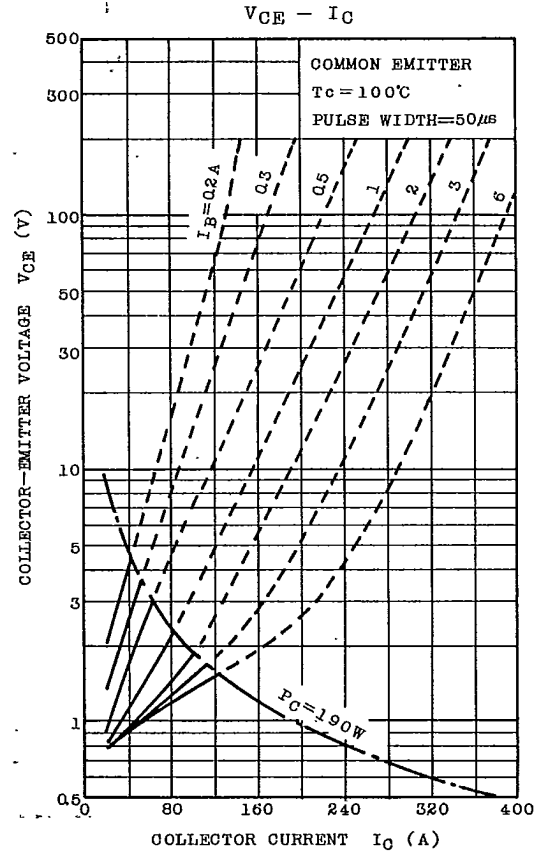
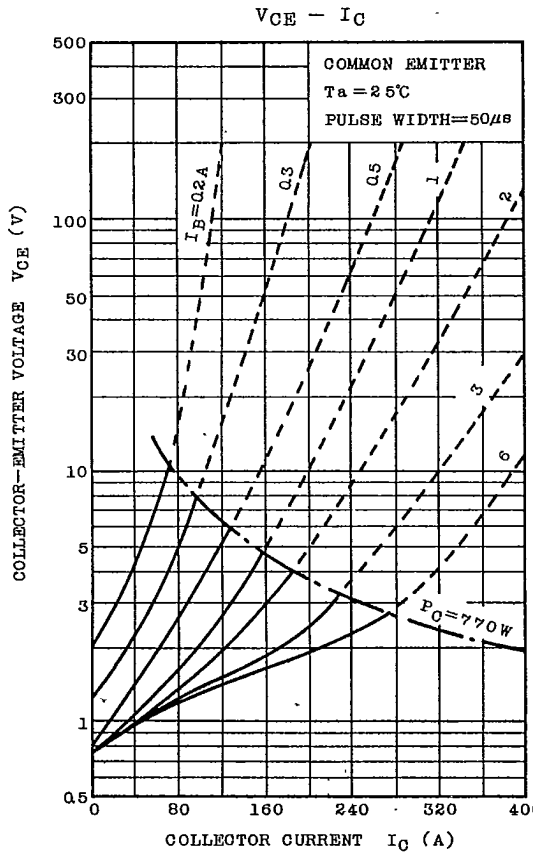
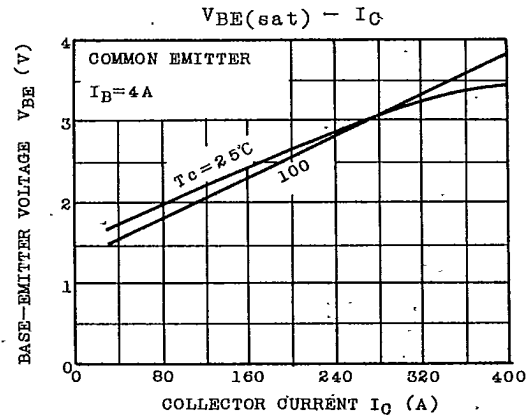
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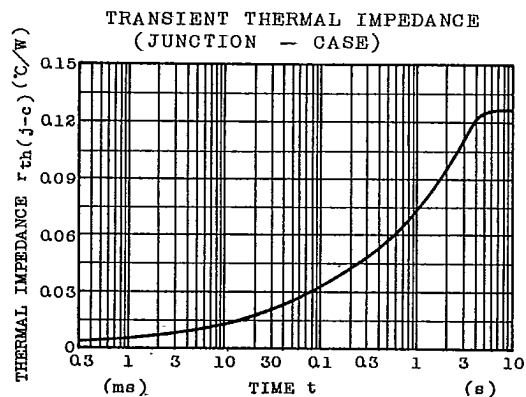
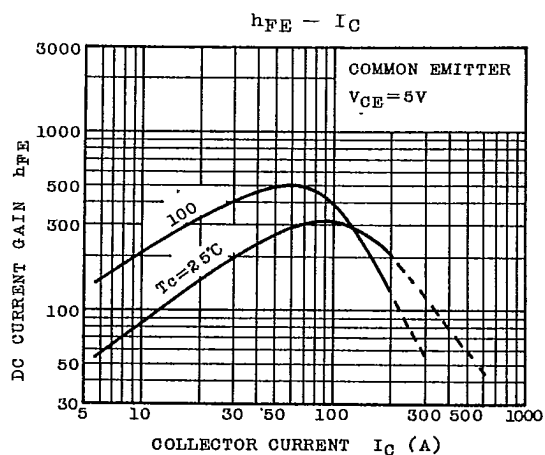
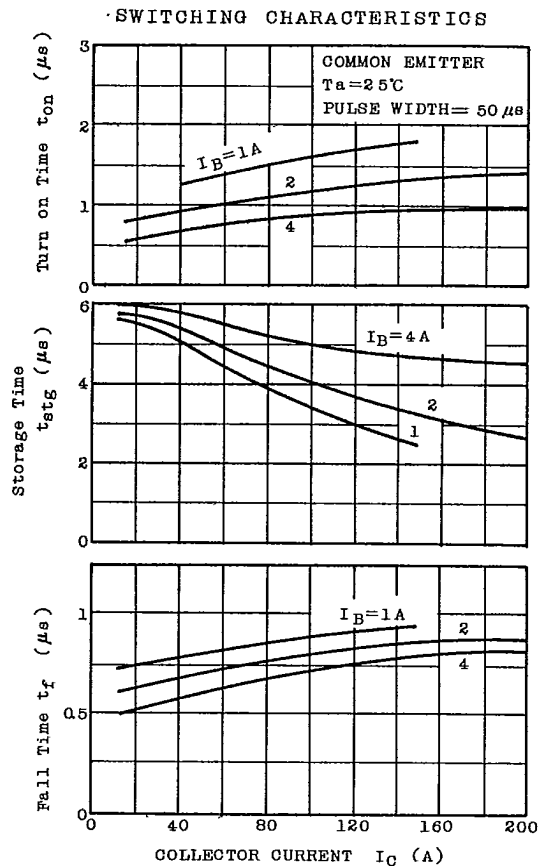
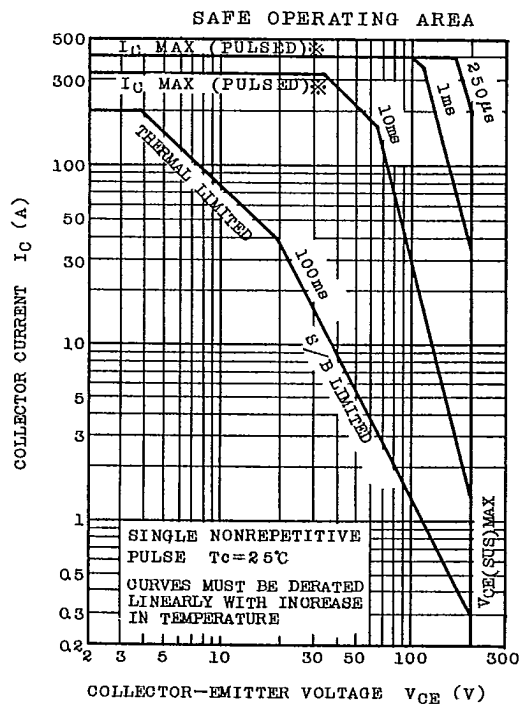
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