

9097250 TOSHIBA (DISCRETE/OPTO)

56C 07846 D T-33-35

SILICON NPN TRIPLE DIFFUSED MESA TYPE
(DARLINGTON POWER)**2SD1034A**

HIGH POWER SWITCHING APPLICATIONS.
DC-AC POWER INVERTER APPLICATIONS.
MOTOR CONTROL APPLICATIONS.

FEATURES:

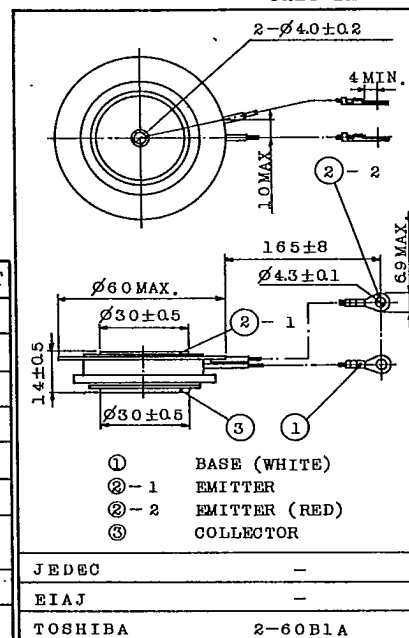
- High Voltage : $V_{CEO(SUS)}=450V$
- Triple Diffused Design.
- Darlington Design.

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	600	V
Collector-Emitter Voltage	$V_{CEO(SUS)}$	450	V
Emitter-Base Voltage	V_{EBO}	6	V
Collector Current	I_C	300	A
Emitter Current	I_E	-300	A
Base Current	I_B	12	A
Thermal Resistance (Double Side Cooling)	$R_{th(j-c)}$	0.08	$^\circ C/W$
Junction Temperature	T_j	125	$^\circ C$
Storage Temperature Range	T_{stg}	-40 ~ 150	$^\circ C$
Mounting Force Required	F	500 $\pm$ 50	kg

INDUSTRIAL APPLICATION

Unit in mm



Weight : 150g

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

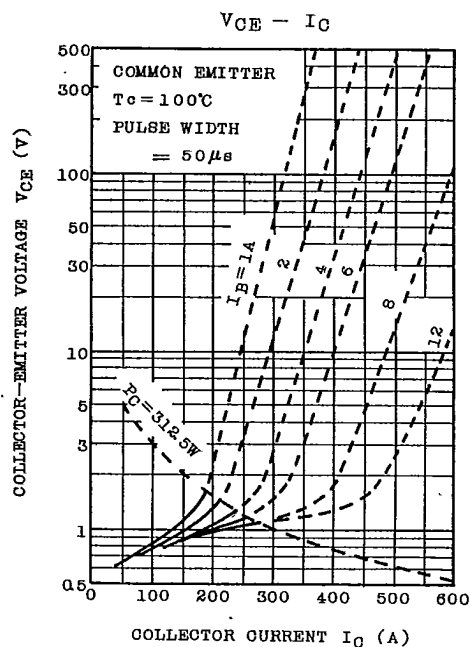
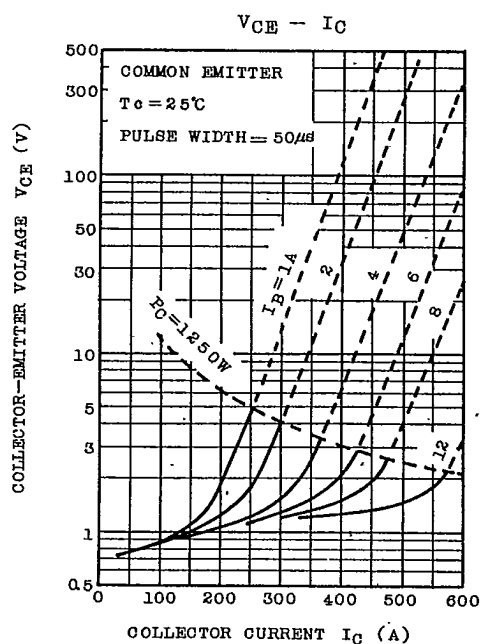
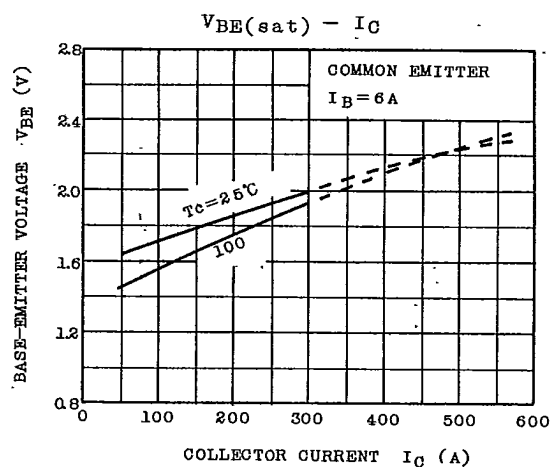
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
DC Current Gain	h_{FE}	$V_{CE}=5V, I_C=300A$	150	-	-	
		$V_{CE}=5V, I_C=150A$	-	500	-	
Collector-Emitter Sustaining Voltage	$V_{CEO(SUS)}$	$I_C=0.5A, L=40mH$	450	-	-	V
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=300A, I_B=6A$ (Note)	-	-	2.0	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		-	-	2.5	V
Collector Cut-off Current	I_{CBO}	$V_{CB}=600V, I_E=0$	-	-	2	mA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=6V, I_C=0$	-	-	600	mA
Switching Time	Turn-on Time	$I_C=300A, T_{B1}=6A, -I_{B2}=16A, V_C=300V$	-	1	2	μs
	Storage Time		-	13	16	
	Fall Time		-	2.5	4	

Note : Pulse Test; Pulse width $\leq 300\mu s$, Duty Cycle $\leq 3\%$
Mounting Force; F=500kg

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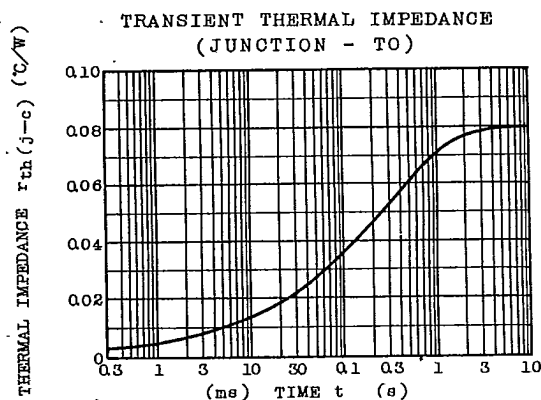
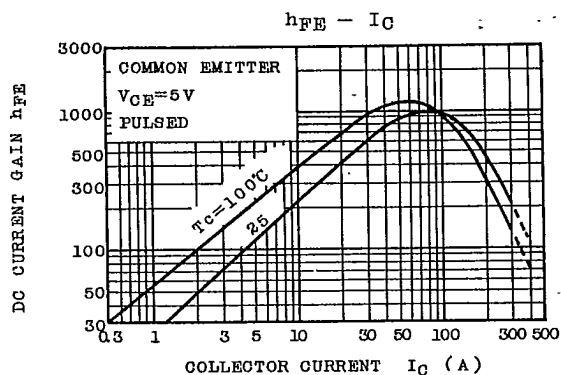
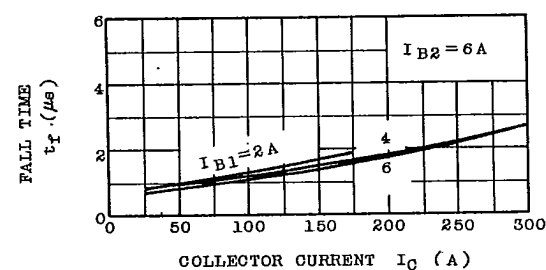
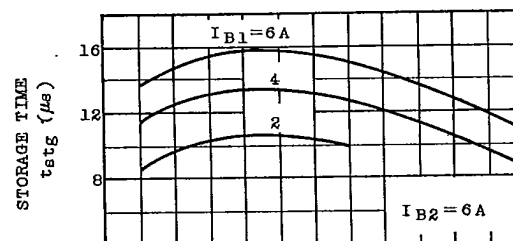
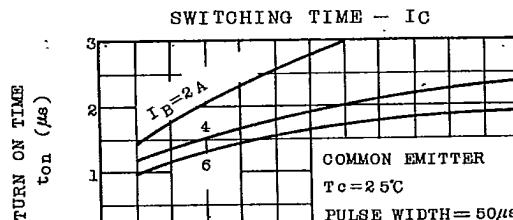
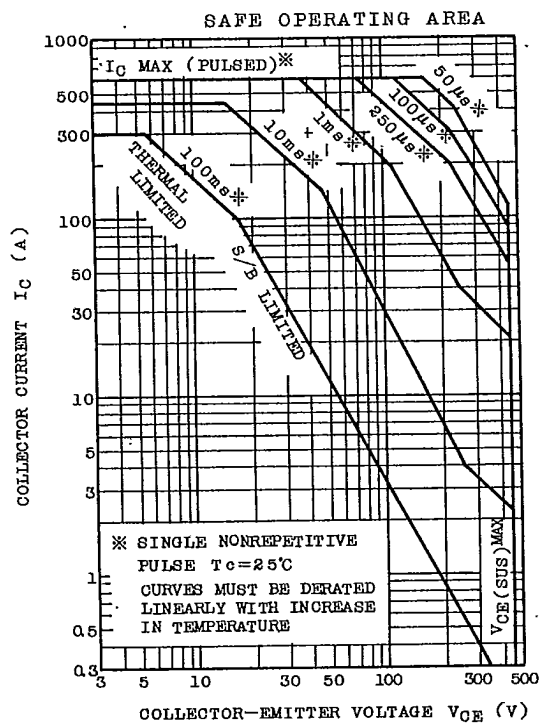
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