

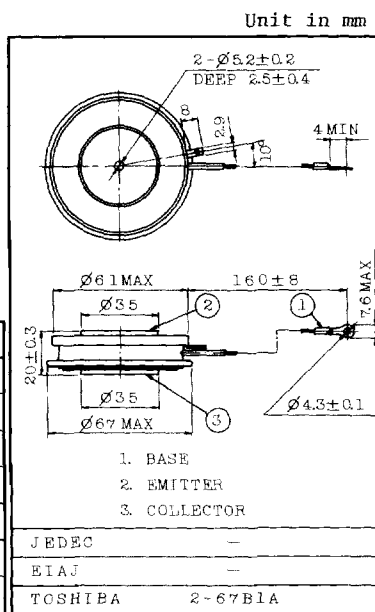
HIGH POWER SWITCHING APPLICATION.
 AC & MOTOR CONTROL APPLICATION.
 INVERTER APPLICATION.

FEATURES:

- . High Voltage : $V_{CE(SUS)} > 900V$
- . Triple Diffused Design
- . Darlington Design

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CB0}	1000	V
Collector-Emitter Voltage	$V_{CE(SUS)}$	900	V
Emitter-Base Voltage	V_{EB0}	6	V
Collector Current	I_C	200	A
Emitter Current	I_E	-200	A
Base Current	I_B	12	A
Thermal Resistance (Double Side Cooling)	$R_{th(j-c)}$	0.04	$^\circ C/W$
Junction Temperature	T_j	125	$^\circ C$
Storage Temperature	T_{stg}	-40 ~ 150	$^\circ C$
Mounting Force Required	F	1000±100	kg



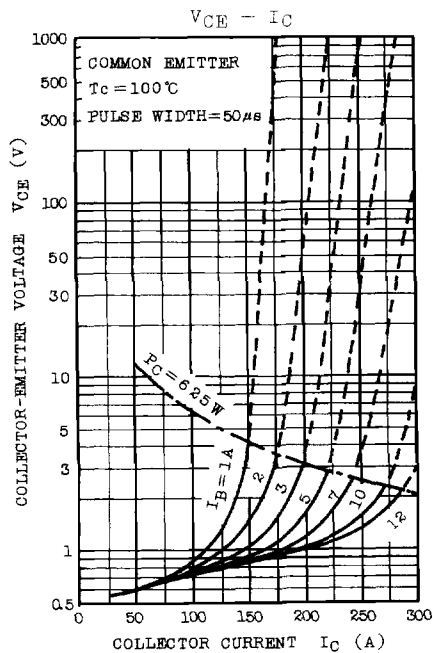
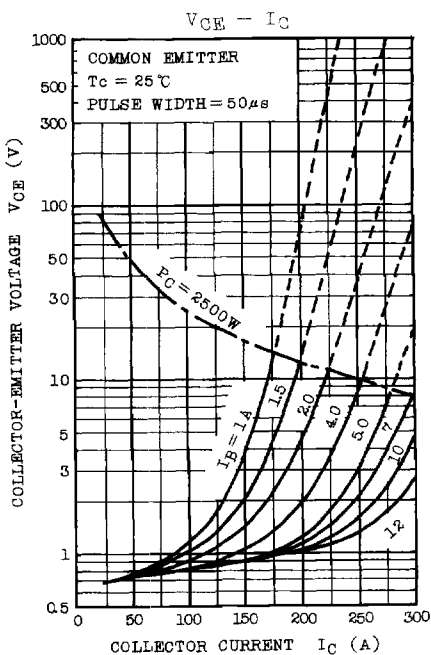
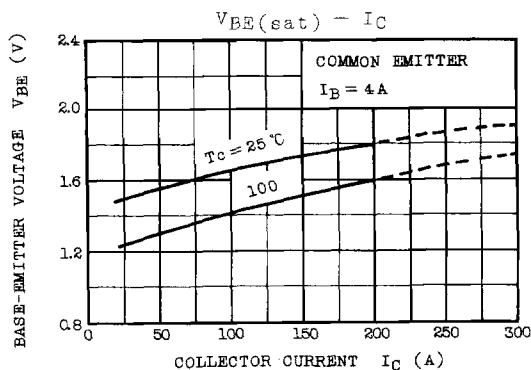
Weight : 250g

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

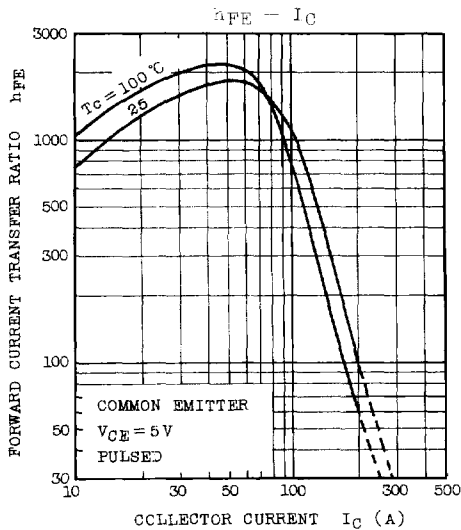
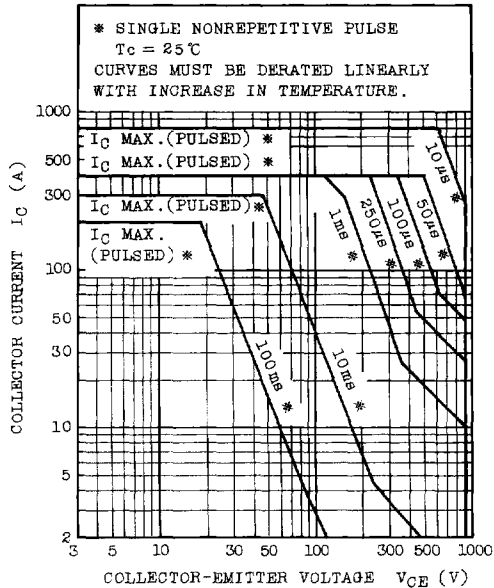
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Forward Current Transfer Ratio	h_{FE}	$V_{CE}=5V, I_C=200A$	80	200	-	
Collector-Emitter Sustaining Voltage	$V_{CE0(SUS)}$	$I_C=0.5A, L=40mH$	900	-	-	V
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=200A, I_B=5A$ (Note)	-	-	2.0	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		-	-	2.5	V
Collector Cut-off Current	I_{CE0}	$V_{CE}=900V, I_B=0$	-	1.0	3.0	mA
Emitter Cut-off Current	I_{EB0}	$V_{EB}=6V, I_C=0$	-	300	2000	mA
Switching Time	Turn-on Time	t_{on}	-	1.8	3.0	μs
	Storage Time	t_{stg}	-	24	30	
	Fall Time	t_f	-	4.0	8.0	
		$I_C=200A, I_{B1}=4A$ $-I_{B2}=8A, V_C=600V$				

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

Mounting Force; F=1000kg



SAFE OPERATING AREA



SWITCHING TIME - I_C

