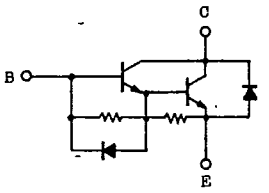
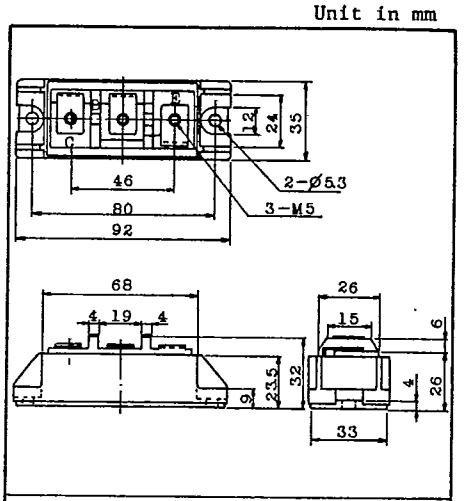
SEMICONDUCTOR
TECHNICAL DATA

MG200H1AL2
MG200H1FL1A



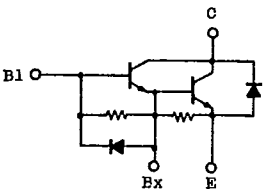
MG200H1AL2

Unit in mm



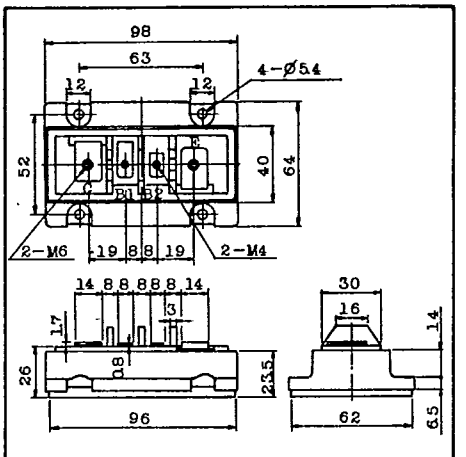
JEDEC	—
EIAJ	—
TOSHIBA	2-68D1A

Weight : 210g



MG200H1FL1

Unit in mm



JEDEC	—
EIAJ	—
TOSHIBA	2-98B1A

Weight : 420g

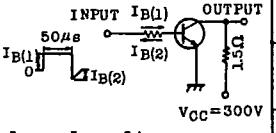
SEMICONDUCTOR
TECHNICAL DATA

MG200H1AL2
MG200H1FL1A

MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CB10}	600	V
Collector-Emitter Voltage		V_{CEO}	600	V
Collector-Emitter Sustaining Voltage		$V_{CEO(SUS)}$	550	V
Emitter-Base Voltage		V_{EB10}	6	V
Collector Current	DC	I_C	200	A
	1ms	I_C	400	
	DC	$-I_C$	200	
Base Current		I_{B1}	8	A
Collector Power Dissipation (Tc=25°C)		P_C	800	W
Junction Temperature		T_j	150	°C
Storage Temperature Range		T_{stg}	-40~125	°C
Isolation Voltage		V_{Isol}	2500 (AC 1 Minute)	V
Screw Torque (Terminal M4/M6/Mounting)		-	20/30/30	kg·cm

ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I_{CB10}	V_{CB1}=600V, I_E=0	-	-	2.0	mA
Emitter Cut-off Current		I_{EB10}	V_{EB1}=6V, I_C=0	-	-	400	mA
Collector-Emitter Sustaining Voltage		$V_{CEO(SUS)}$	I_C=0.5A, L=40mH	550	-	-	V
DC Current Gain		h_{FE}	V_{CE}=5V, I_C=200A	80	-	-	
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$	I_C=200A, I_{B1}=6A	-	-	2.0	V
Base-Emitter Saturation Voltage		$V_{B1E(sat)}$		-	-	2.7	V
Emitter-Collector Voltage		V_{ECO}	I_E=200A, I_{B1}=0	-	-	1.5	V
Reverse Recovery Time		t_{rr}	$-I_C$=200A, V_{EB1}=3V V_{CE}=300V	-	-	2.0	μs
Collector Output Capacitance		C_{ob1}	V_{CB1}=50V, I_E=0 f=1MHz	-	1670	-	pF
Switching Time	Turn-on Time	t_{on}		-	-	2.0	μs
	Storage Time	t_{stg}		-	-	12	
	Fall Time	t_f	$I_{B(1)}$=-$I_{B(2)}$=6A DUTY CYCLE=0.5%	-	-	4.0	
Thermal Resistance (Junction to Case)		$R_{th(j-c)}$	Transistor	-	-	0.156	°C/W
			Diode	-	-	0.65	