

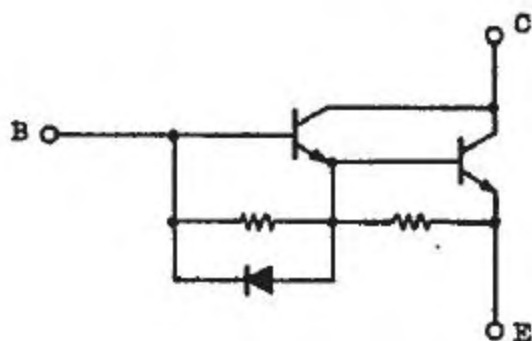


SEMICONDUCTOR

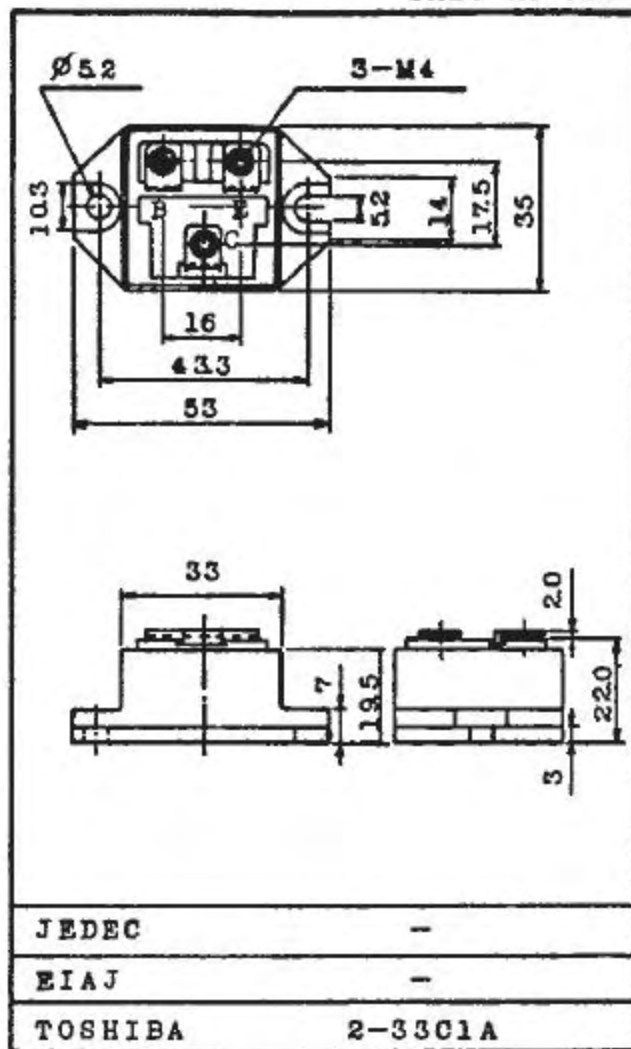
TECHNICAL DATA

MG30G1BL3
 MG30G1JL1
 MG30G2CL3
 MG30G2DL1
 MG30G6EL1

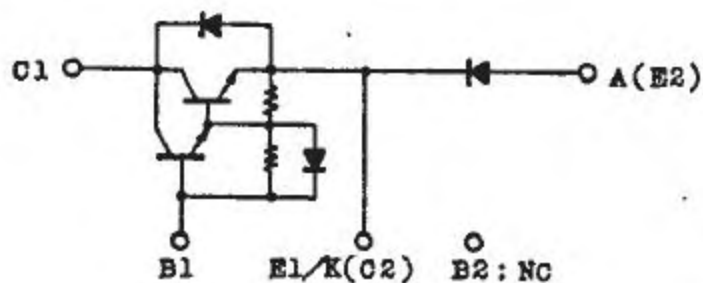
Unit in mm



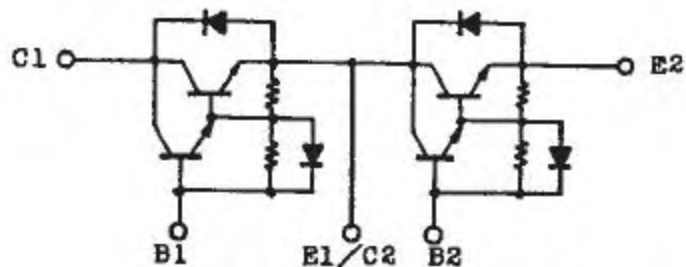
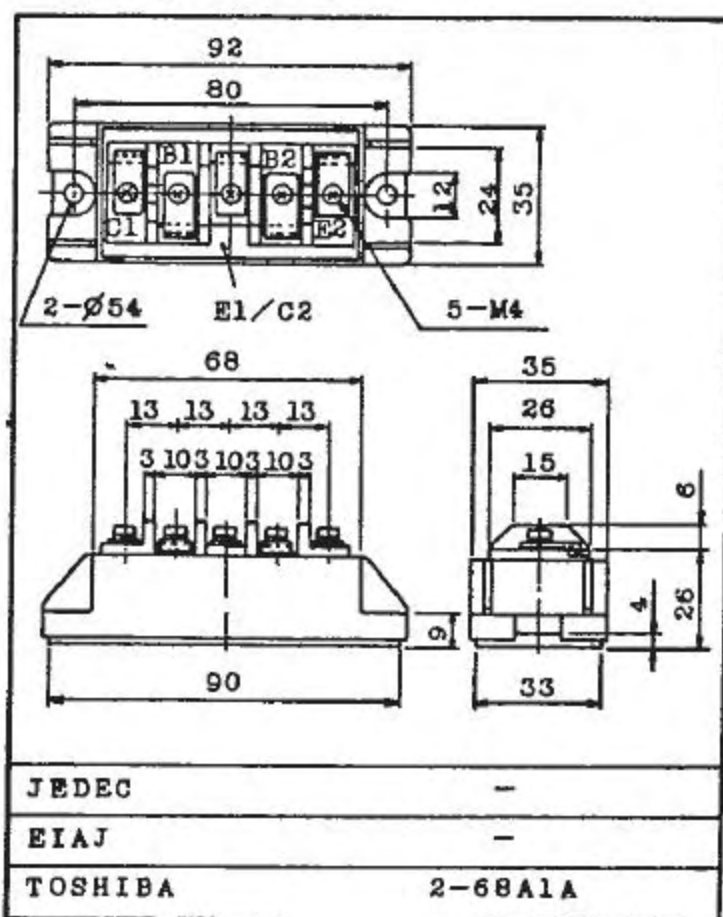
MG30G1BL3



Weight : 86g



MG30G1JL1

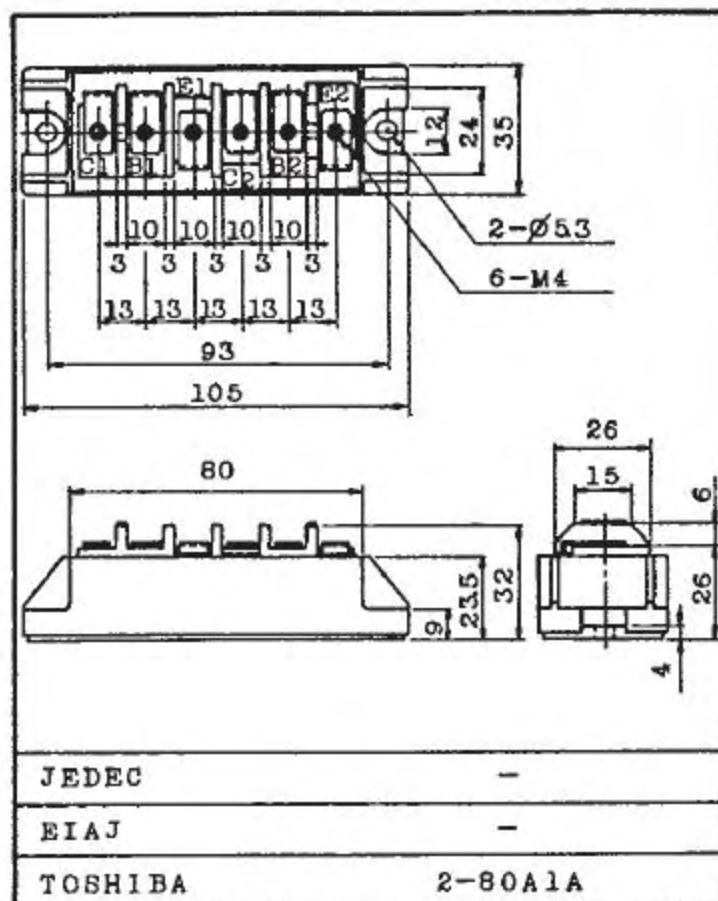
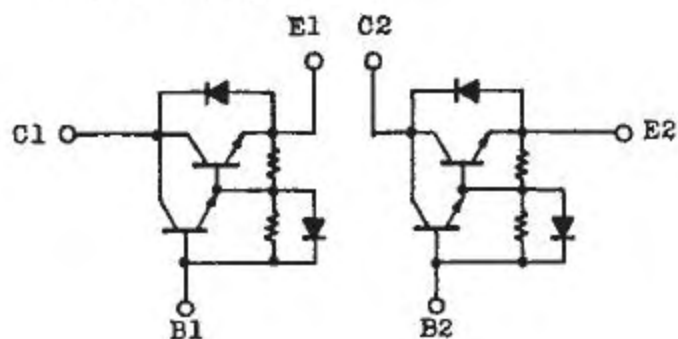


MG30G2CL3

MG 3 0 G 1 B L 3
 MG 3 0 G 1 J L 1
 MG 3 0 G 2 C L 3
 MG 3 0 G 2 D L 1
 MG 3 0 G 6 E L 1

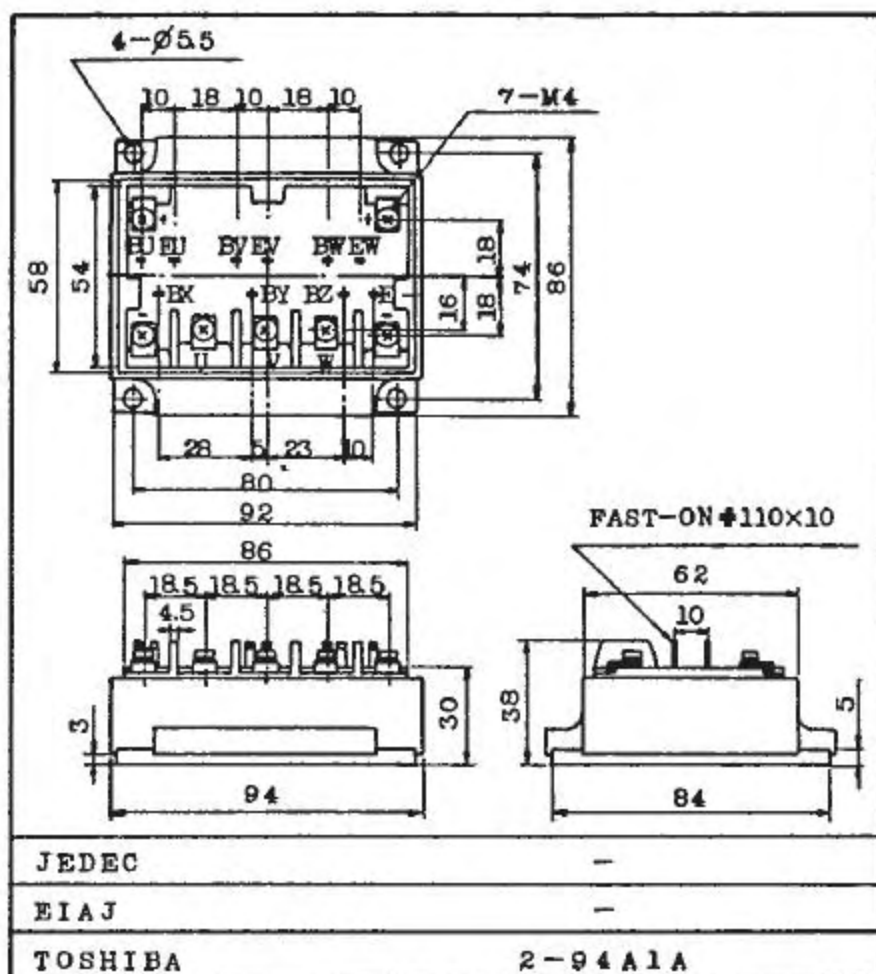
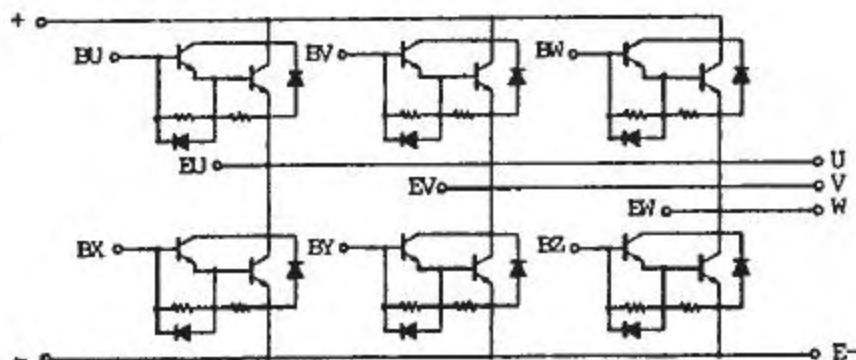
Unit in mm

MG 3 0 G 2 D L 1



Weight : 245g

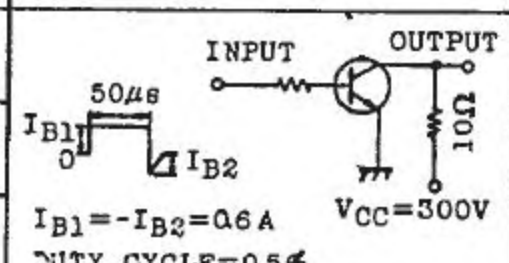
MG 3 0 G 6 E L 1



MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		VCBO	600	V
Collector-Emitter Sustaining Voltage		VCEX(SUS)	600	V
Collector-Emitter Sustaining Voltage		VCEO(SUS)	450	V
Emitter-Base Voltage		VEBO	6	V
Collector Current	DC	IC	30	A
	lms	ICP	60	A
Forward Current	DC	IF	30	A
	lms	IFM	60	A
Base Current		IB	2	A
Collector Power Dissipation (Tc=25°C)		PC	250	W
Junction Temperature		Tj	150	°C
Storage Temperature Range		Tstg	-40 ~ 125	°C
Isolatic.. Voltage		VIsol	2500 (AC 1 Minute)	V
Screw Torque (Terminal/Mounting)		-	20/30	kg·cm

ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		ICBO	V _{CB} =600V, I _E =0	-	-	1.0	mA
Emitter Cut-off Current		IEBO	V _{EB} =6V, I _C =0	-	-	200	mA
Collector-Emitter Sustaining Voltage		V _{CEO(SUS)}	I _C =0.5A, L=40mH	450	-	-	V
DC Current Gain		h _{FE}	V _{CE} =5V, I _C =30A	100	-	-	
Collector-Emitter Saturation Voltage		V _{CE(sat)}	I _C =30A, I _B =0.6A	-	-	2.0	V
Base-Emitter Saturation Voltage		V _{BE(sat)}		-	-	2.5	V
Switching Time	Turn-on Time	t _{on}	 <p> INPUT OUTPUT 50μs I_{B1} I_{B2} I_{B1}=-I_{B2}=0.6A DUTY CYCLE=0.5 V_{CC}=300V </p>	-	-	1.0	μs
	Storage Time	t _{stg}		-	-	12	
	Fall Time	t _f		-	-	2.0	
Forward Voltage		V _F	I _F =30A, I _B =0	-	-	1.5	V
Reverse Recovery Time		t _{rr}	I _F =30A, V _{BE} =-3V di/dt=100A/μs	-	-	2.0	μs
Thermal Resistance		R _{th(j-c)}	Transistor	-	-	0.5	°C/W
			Diode	-	-	1.8	