

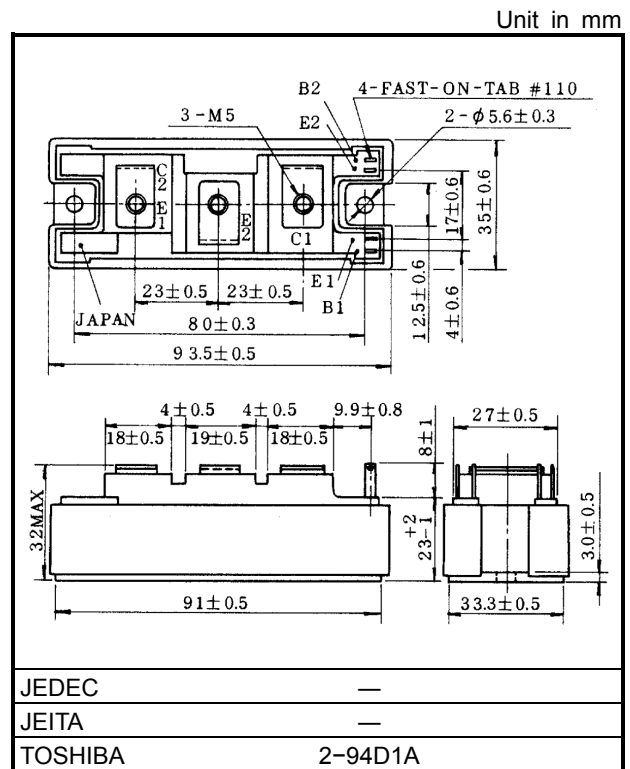
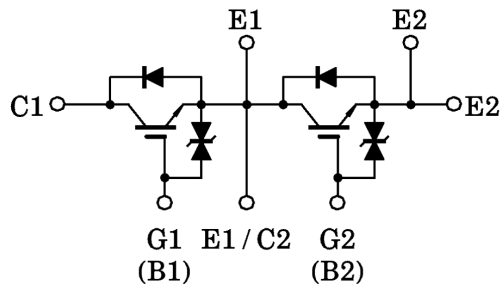
TOSHIBA GTR Module Silicon N Channel IGBT

# MG50Q2YS40

High Power Switching Applications.  
Motor Control Applications.

- High input impedance
- High speed:  $t_f = 0.5\mu s$  (max.)  
 $t_{rr} = 0.5\mu s$  (max.)
- Low saturation voltage  
:  $V_{CE(sat)} = 4.0V$  (max.)
- Enhancement-mode
- Includes a complete half bridge in one package.
- The electrodes are isolated from case.

### Equivalent Circuit



Weight: 202g

### Maximum Ratings (Ta = 25°C)

Characteristic	Symbol	Rating	Unit
Collector-emitter voltage	$V_{CES}$	1200	V
Gate-emitter voltage	$V_{GES}$	±20	V
Collector current	DC	$I_C$	50
	1ms	$I_{CP}$	100
Forward current	DC	$I_F$	50
	1ms	$I_{FM}$	100
Collector power dissipation (Tc = 25°C)	$P_C$	400	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 / mounting)	—	3 / 3	N·m