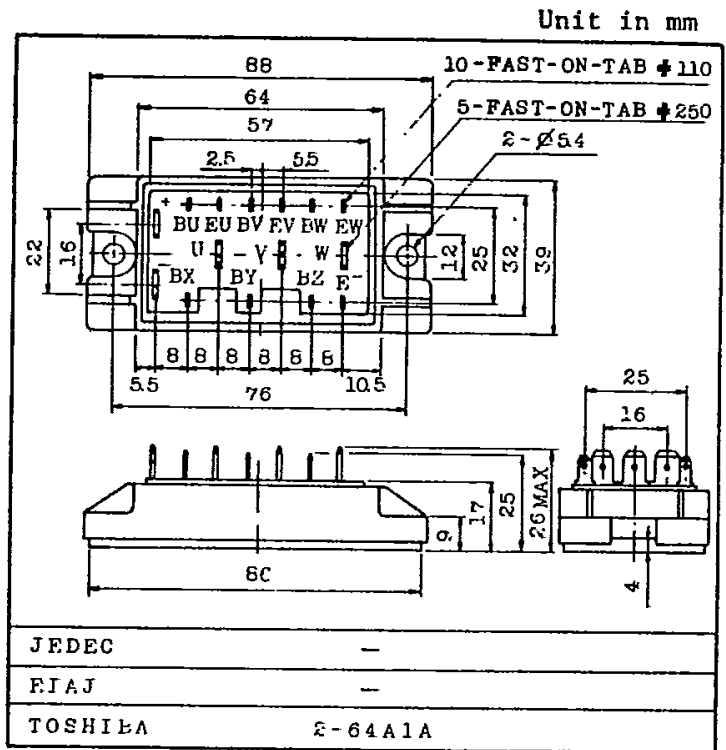


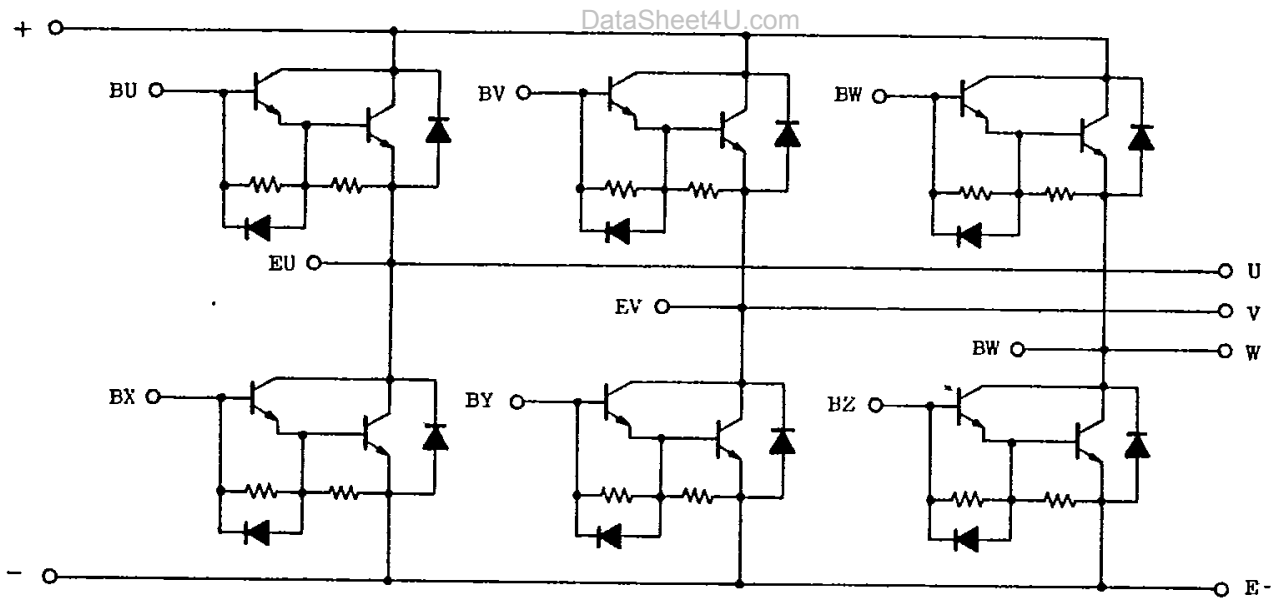
HIGH POWER SWITCHING APPLICATIONS.
 MOTOR CONTROL APPLICATIONS.

FEATURES:

- . The Collector is Isolation from Case.
- . 6 Power Transistors and 6 Free Wheeling Diodes are Built Into 1 Package.
- . High DC Current Gain
 - : $h_{FE}=100(\text{Min.}) (I_C=15A)$
- . Low Saturation Voltage
 - : $V_{CE}(\text{sat})=2.0V(\text{Max.}) (I_C=15A)$



EQUIVALENT CIRCUIT





MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V _{CBO}	600	V
Collector-Emitter Sustaining Voltage		V _{CEX(SUS)}	600	V
Collector-Emitter Sustaining Voltage		V _{CEO(SUS)}	500	V
Emitter-Base Voltage		V _{EBO}	6	V
Collector Current	DC	I _C	15	A
	1ms	I _{CP}	30	
Forward Current	DC	I _F	15	A
	1ms	I _{FM}	30	
Base Current		I _B	1.0	A
Collector Power Dissipation (T _c =25°C)		P _C	100	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		-	30	kg·cm

ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I _{CBO}	V _{CB} =600V, I _E =0	-	-	1.0	mA
Emitter Cut-off Current		I _{EBO}	V _{EB} =6V, I _C =0	-	-	100	mA
Collector-Emitter Sustaining Voltage		V _{CEO(SUS)}	I _C =0.5A, L=40mH	500	-	-	V
DC Current Gain		h _{FE}	V _{CE} =5V, I _C =15A	100	-	-	-
Collector-Emitter Saturation Voltage		V _{CE(sat)}	I _C =15A, I _B =0.4A	-	-	2.0	V
Base-Emitter Saturation Voltage		V _{BE(sat)}		-	-	2.5	
Switching Time	Turn-on Time	t _{on}	<p>INPUT OUTPUT 50µF 20Ω I_{B1} I_{E2} V_{CE}=300V I_{B1}=0.4A, I_{E2}=-0.4A DUTY CYCLE = 0.5</p>	-	-	1.0	µs
	Storage Time	t _{stg}		-	-	0.12	
	Fall Time	t _f		-	-	2.0	
Forward Voltage		V _F	I _F =15A, I _B =0	-	-	1.7	V
Reverse Recovery Time		t _{rr}	I _F =15A, V _{BE} =-2V di/dt=60A/µs	-	-	0.7	µs
Thermal Resistance		R _{th(j-c)}	Transistor	-	-	1.25	°C/W
			Diode	-	-	2.8	

TOSHIBA CORPORATION

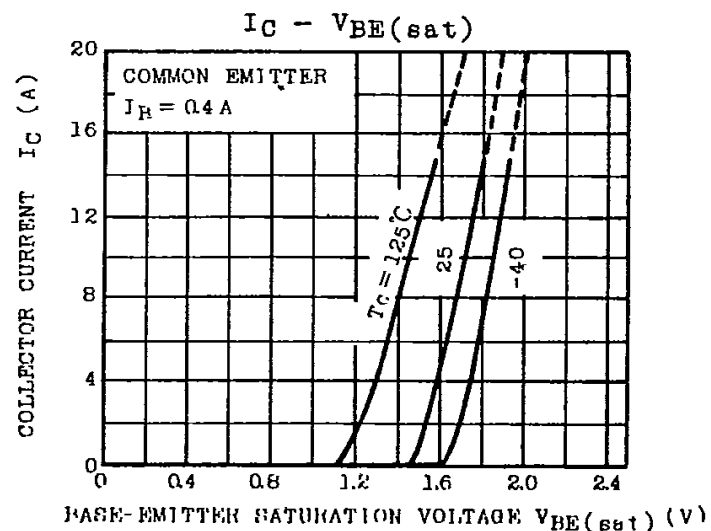
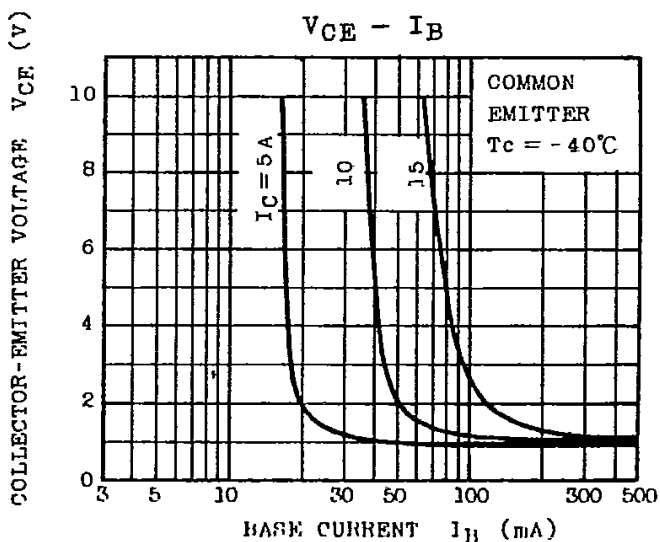
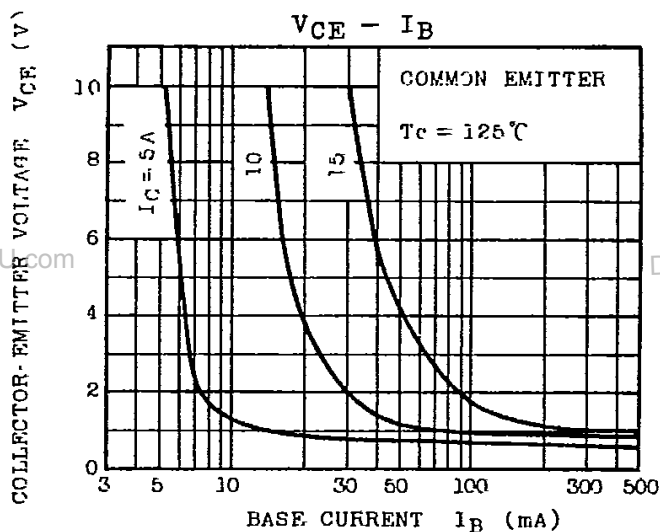
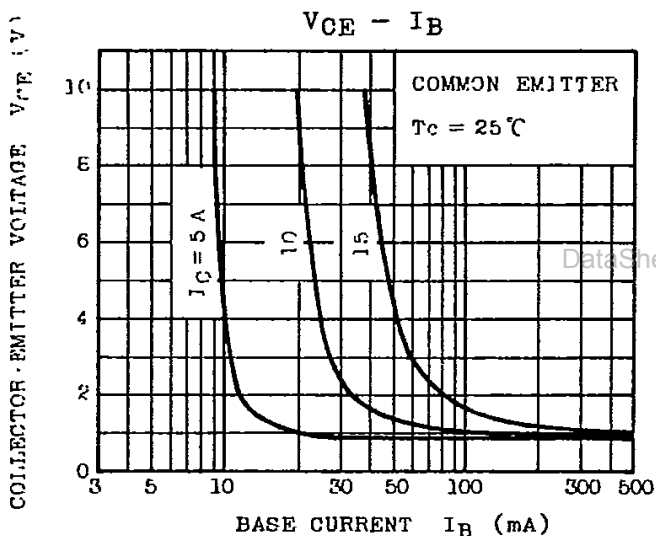
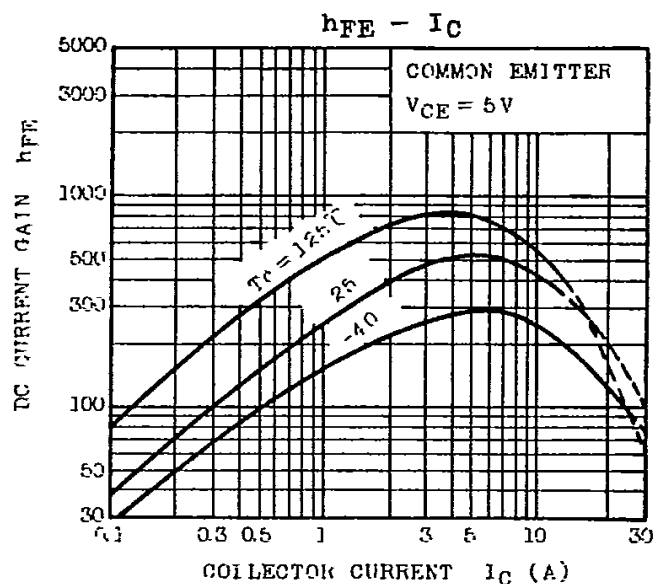
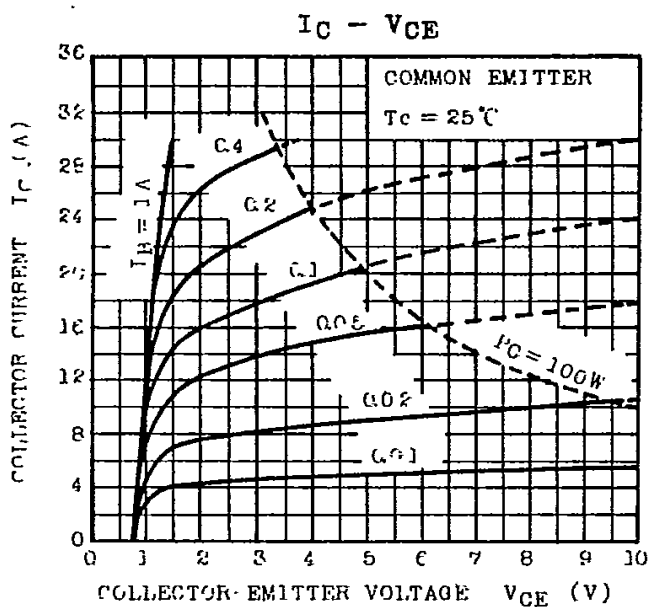
EGA-MG15H6EL1-2



SEMICONDUCTOR

TECHNICAL DATA

MG15H6EL1





SEMICONDUCTOR

TECHNICAL DATA

MG15H6EL1

