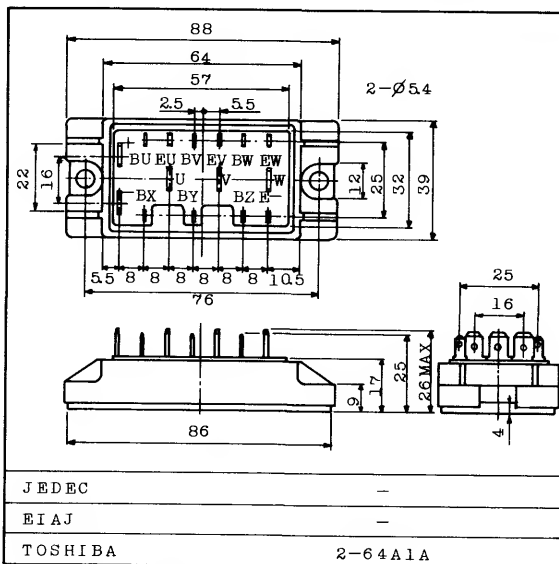


HIGH POWER SWITCHING APPLICATIONS.
MOTOR CONTROL APPLICATIONS.

FEATURES:

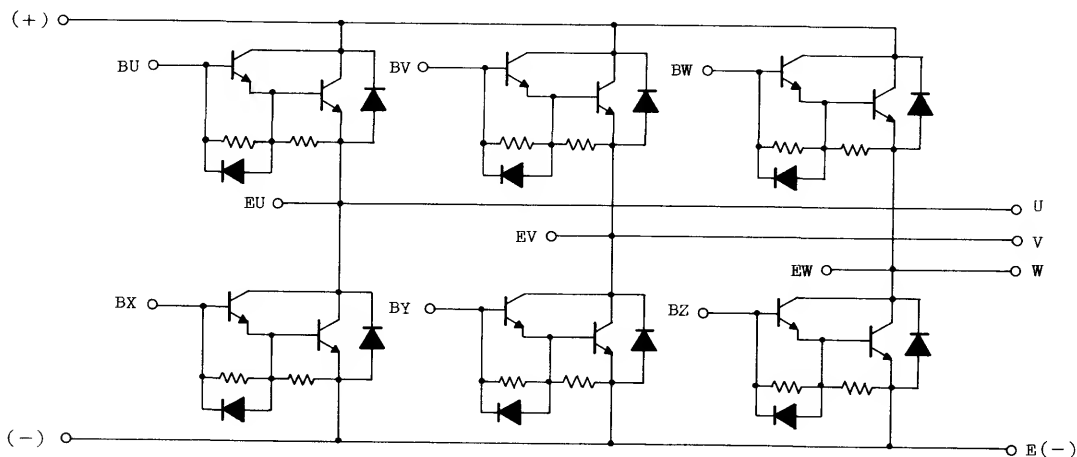
- . The Collector is Isolated from Case.
- . 6 Darlington Transistor are Built-In to 1 Package.
- . With Built-in Free Wheeling Diode.
- . High DC Current Gain
: $h_{FE}=100(\text{Min.})$ ($I_C=15A$)
- . Low Saturation Voltage
: $V_{CE(sat)}=2V(\text{Max.})$ ($I_C=15A$)
- . High Speed : $t_f=2\mu s(\text{Max.})$ ($I_C=15A$)

Unit in mm



Weight : 180g

EQUIVALENT CIRCUIT

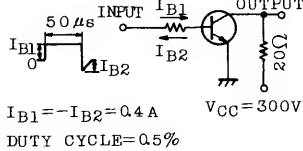


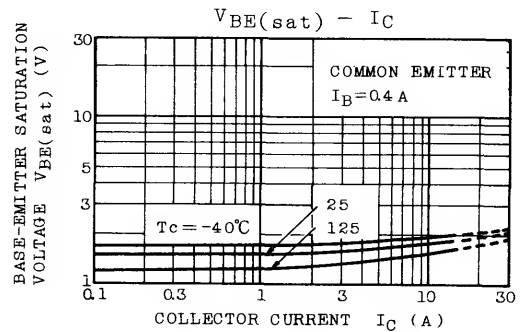
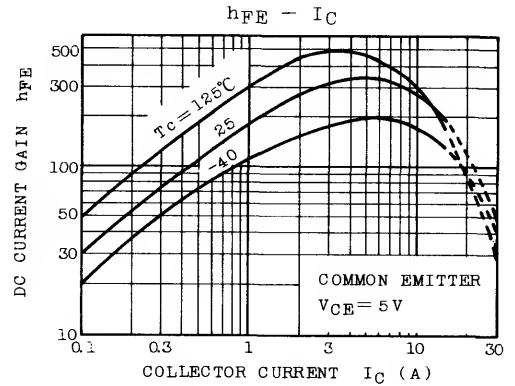
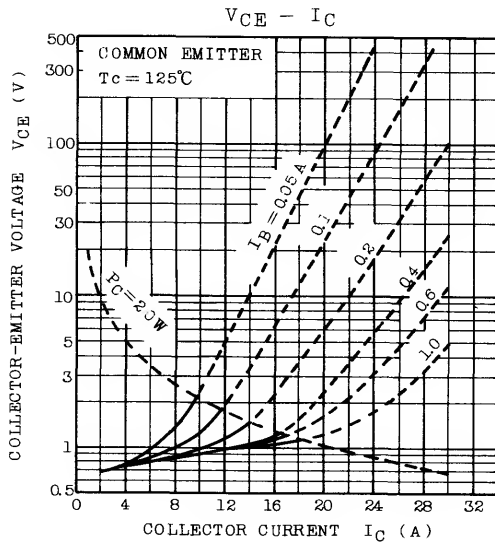
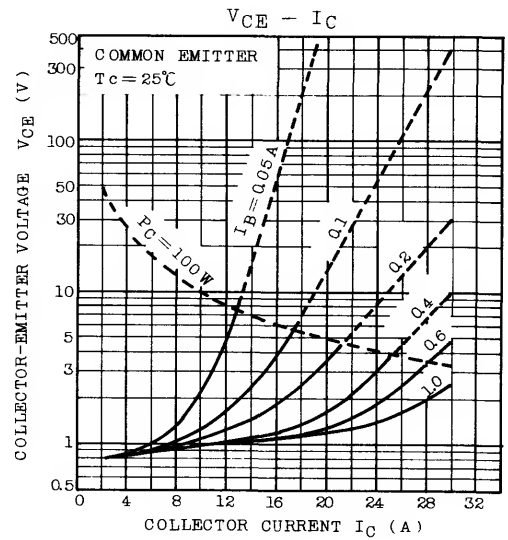
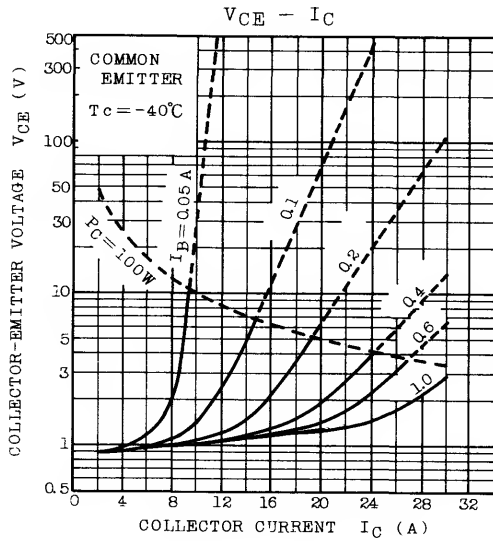
MG15G6EL1

MAXIMUM RATINGS (Tc=25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V _{CB0}	600	V
Collector-Emitter Voltage		V _{CEO}	600	V
Collector-Emitter Sustaining Voltage		V _{CEO(SUS)}	450	V
Emitter-Base Voltage		V _{EB0}	6	V
Collector Current	DC	I _C	15	A
	lms	I _C	30	A
	DC	-I _C	15	A
Base Current		I _B	1	A
Collector Power Dissipation (Tc=25°C)		P _C	100	W
Junction Temperature		T _j	150	°C
Storage Temperature Range		T _{stg}	-40 ~ 125	°C
Isolation Voltage		V _{Isol}	2000(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	450	-	-	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	V
Emitter-Collector Voltage		V _{ECO}	I _E =15A, I _B =0	-	-	1.6	V
Reverse Recovery Time			-I _C =15A, V _{EB} =2V, V _{CE} =300V	-	-	2.0	μs
Collector Output Capacitance		C _{ob}	V _{CB} =50V, I _E =0, f=1MHz	-	400	-	pF
Switching Time	Turn-on Time	t _{on}	 50 μs INPUT I_{B1} OUTPUT I_{B2} I_{B1} I_{B2} I_{B1}=-I_{B2}=0.4 A V_{CC}=300V DUTY CYCLE=0.5%	-	-	1.0	μs
	Storage Time	t _{stg}		-	-	12	
	Fall Time	t _f		-	-	2.0	
Thermal Resistance (Junction to Case)		R _{th(j-c)}		-	-	1.25	°C/W



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