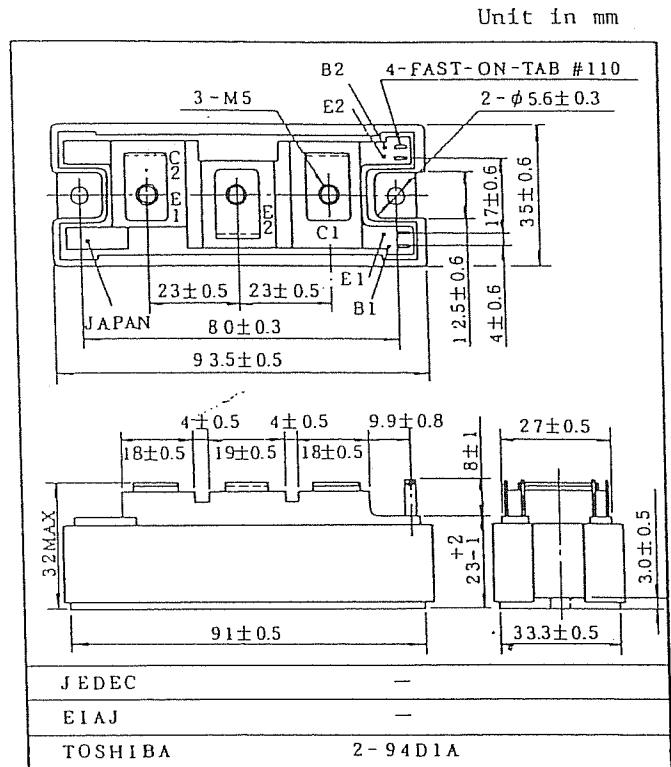
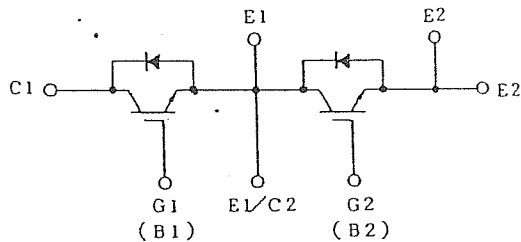


HIGH POWER SWITCHING APPLICATIONS.
MOTOR CONTROL APPLICATIONS.

- High Input Impedance
- High Speed : $t_f=0.35\mu s$ (Max.)
 $t_{rr}=0.15\mu s$ (Max.)
- Low Saturation Voltage
: $V_{CE(sat)}=3.5V$ (Max.)
- Enhancement-Mode
- Includes a Complete Half Bridge in One Package.
- The Electrodes are Isolated from Case.

EQUIVALENT CIRCUIT

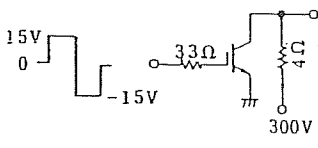


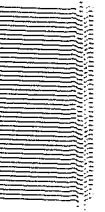
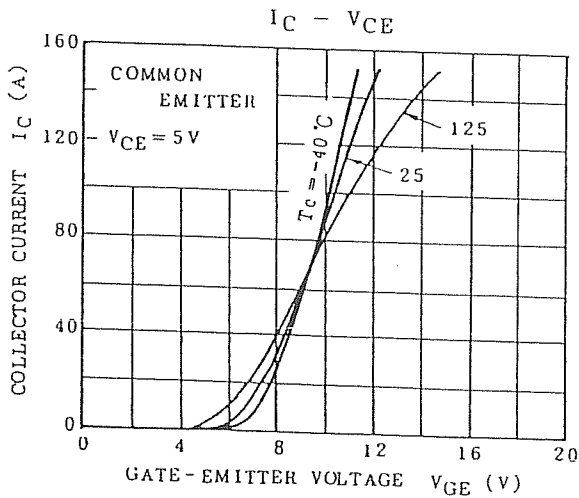
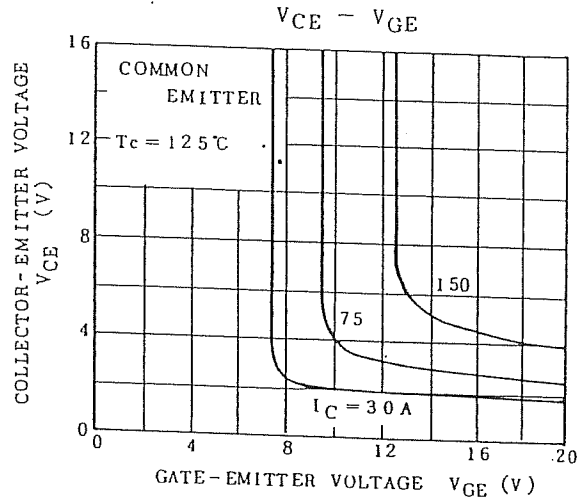
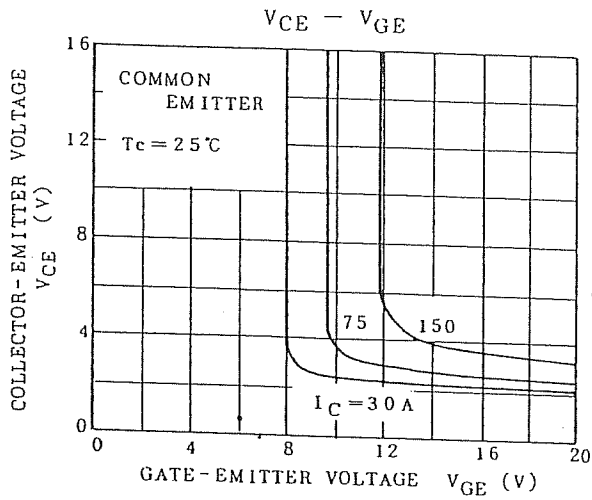
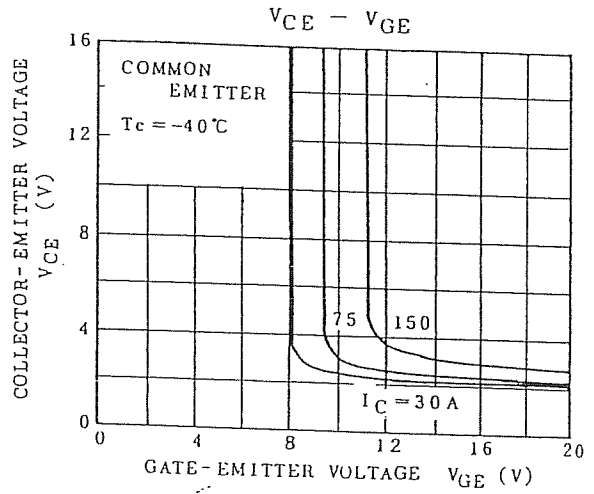
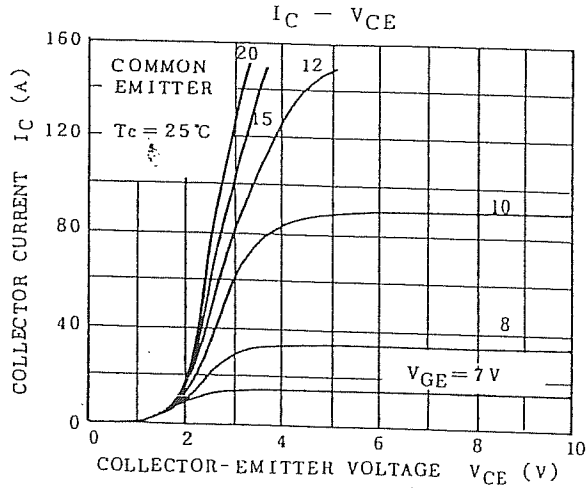
Weight: 202g

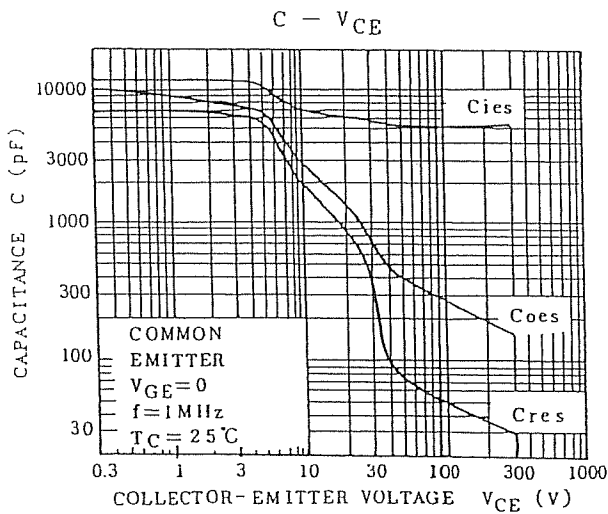
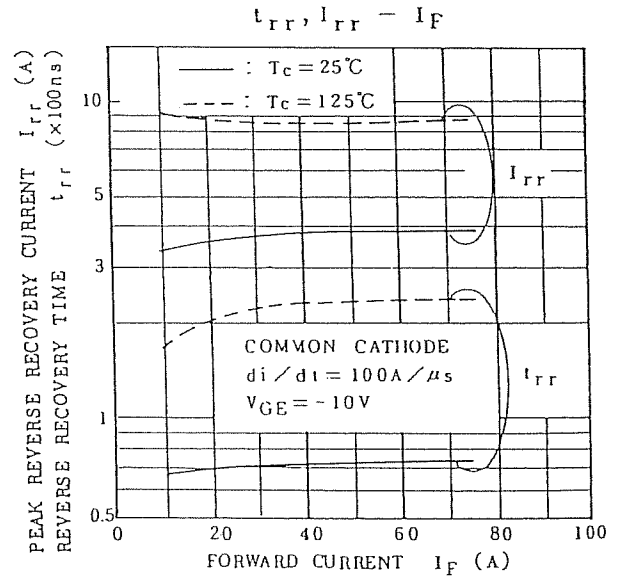
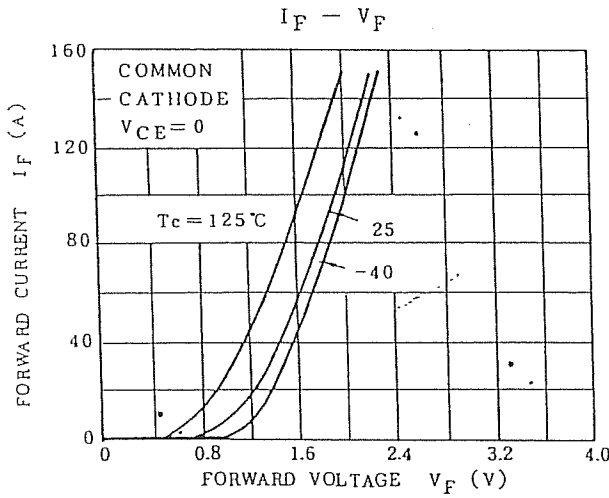
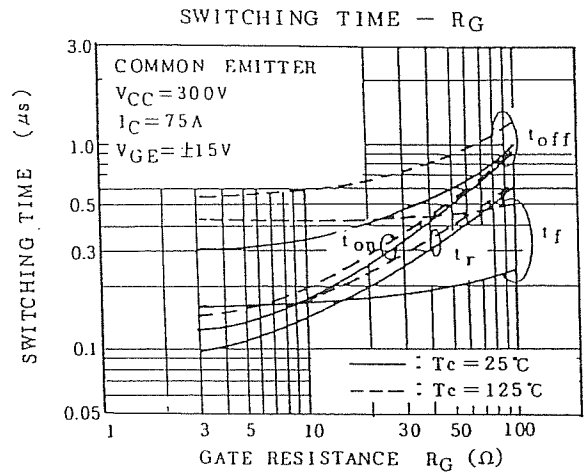
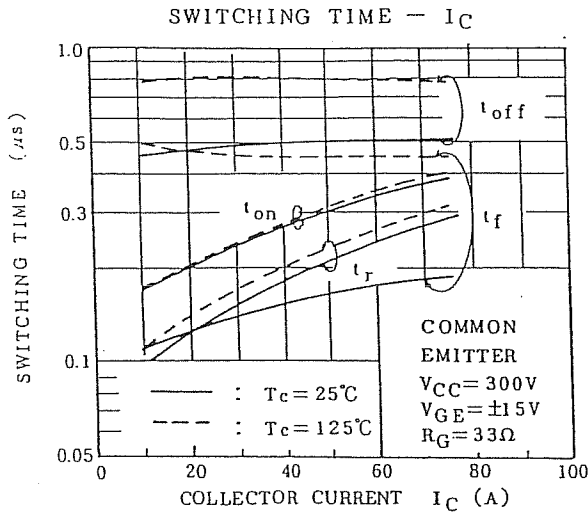
MAXIMUM RATINGS ($T_a=25^\circ C$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Emitter Voltage	V_{CES}	600	V
Gate-Emitter Voltage	V_{GES}	± 20	V
Collector Current	DC	I_C	75
	1ms	I_{CP}	150
Forward Current	DC	I_F	75
	1ms	I_{FM}	150
Collector Power Dissipation	P_C	350	W
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature Range	T_{stg}	-40~125	$^\circ C$
Isolation Voltage	V_{Isol}	2500 (AC, 1 minute)	V
Screw Torque (Terminal/Mounting)	-	3/3	N.m

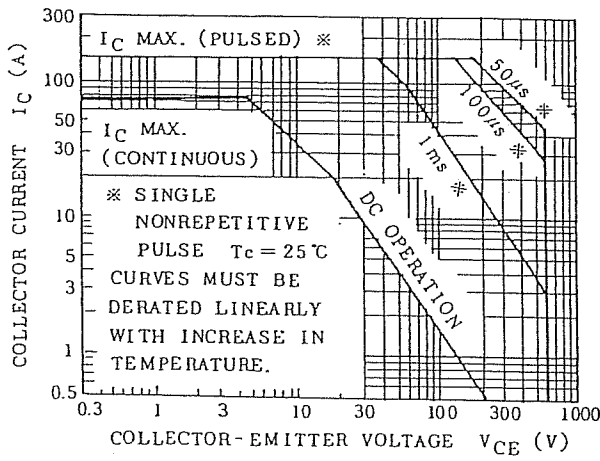
ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Gate Leakage Current		IGES	VGE=±20V, VCE=0	-	-	±500	
Collector Cut-off Current		ICES	VCE=600V, VGE=0	-	-	1.0	mA
Collector-Emitter Breakdown Voltage		V(BR)CES	IC=10mA, VGE=0	600	-	-	V
Gate-Emitter Cut-off Voltage		VGE(OFF)	IC=75mA, VCE=5V	3.0	-	6.0	V
Collector-Emitter Saturation Voltage		VCE(sat)	IC=75A, VGE=15V	-	2.7	3.5	V
Input Capacitance		Cies	VCE=10V, VGE=0, f=1MHz	-	6800	-	pF
Switching Time	Rise Time	tr		-	0.30	0.60	μs
	Turn-on Time	ton		-	0.40	0.80	
	Fall Time	tf		-	0.18	0.35	
	Turn-off Time	toff		-	0.60	1.00	
Forward Voltage		VF	IF=75A, VGE=0	-	1.7	2.5	V
Reverse Recovery Time		trr	IF=75A, VGE=-10V di/dt=100A/μs	-	0.08	0.15	μs
Thermal Resistance		Rth(j-c)	Transistor	-	-	0.35	°C/W
			Diode	-	-		





SAFE OPERATING AREA



REVERSE BIAS SOA

