

9097250 TOSHIBA (DISCRETE/OPTO)

90D 16256

DT-33-35



# SEMICONDUCTOR

## TECHNICAL DATA

MG100G1FL1

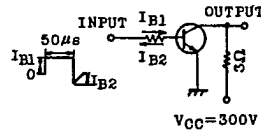
MG100G1AL3

## MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	VCBO	600	V
Collector-Emitter Voltage	VCEO	600	V
Collector-Emitter Sustaining Voltage	VCEO(SUS)	450	V
Emitter-Base Voltage	VEBO	6	V
Collector Current	DC IC	100	A
	1ms IC	200	
	DC -IC	100	
Base Current	IB	5	A
Collector Power Dissipation (Tc=25°C)	PC	600	W
Junction Temperature	Tj	150	°C
Storage Temperature Range	Tstg	-40~125	°C
Isolation Voltage	VIsol	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	ICBO	V <sub>CB</sub> =600V, I <sub>E</sub> =0	-	-	2.0	mA
Emitter Cut-off Current	IEBO	V <sub>EB</sub> =6V, I <sub>C</sub> =0	-	-	400	mA
Collector-Emitter Sustaining Voltage	V <sub>CEO(SUS)</sub>	I <sub>C</sub> =0.5A, L=40mH	450	-	-	V
DC Current Gain	h <sub>FE</sub>	V <sub>CE</sub> =5V, I <sub>C</sub> =100A	100	-	-	
Collector-Emitter Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =100A, I <sub>B</sub> =2A	-	-	2.0	V
Base-Emitter Saturation Voltage	V <sub>BE(sat)</sub>		-	-	2.5	V
Emitter-Collector Voltage	VECO	I <sub>E</sub> =100A, I <sub>B</sub> =0	-	-	1.5	V
Reverse Recovery Time	t <sub>rr</sub>	-I <sub>C</sub> =100A, V <sub>EB</sub> =3V V <sub>CE</sub> =300V	-	-	2.0	μs
Collector Output Capacitance	C <sub>ob</sub>	V <sub>CB</sub> =50V, I <sub>E</sub> =0 f=1MHz	-	1000	-	pF
Switching Time	Turn-on Time	t <sub>on</sub>	-	-	1.0	μs
	Storage Time	t <sub>stg</sub>	-	-	12	
	Fall Time	t <sub>f</sub>	-	-	2.0	
Thermal Resistance (Junction to Case)	R <sub>th(j-c)</sub>	Transistor	-	-	0.208	°C/W
		Diode	-	-	0.65	



TOSHIBA CORPORATION

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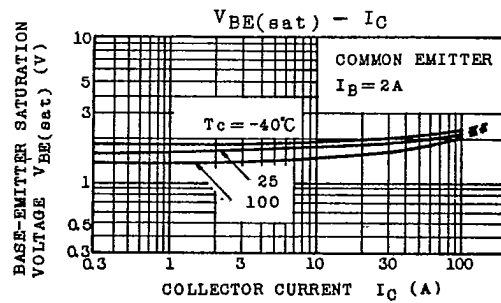
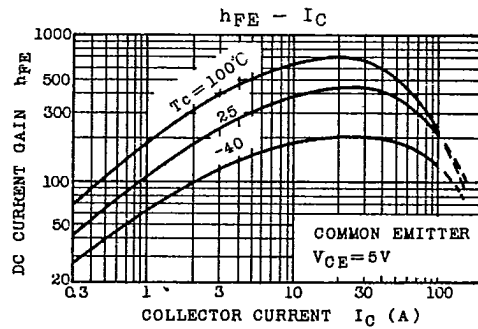
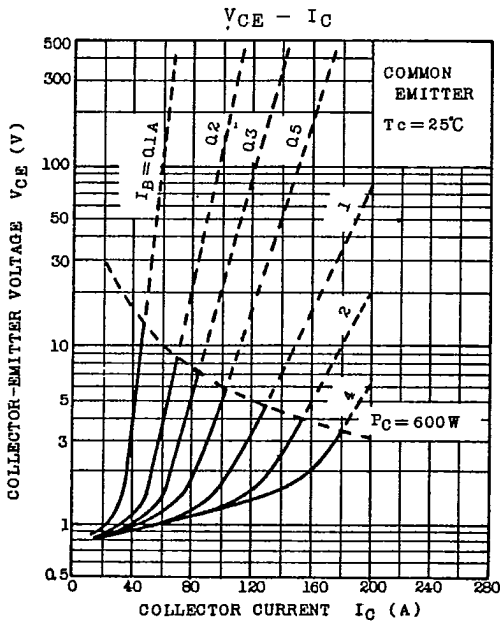
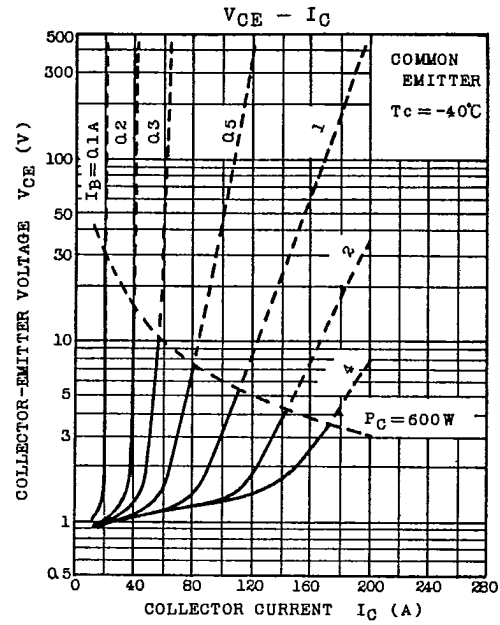
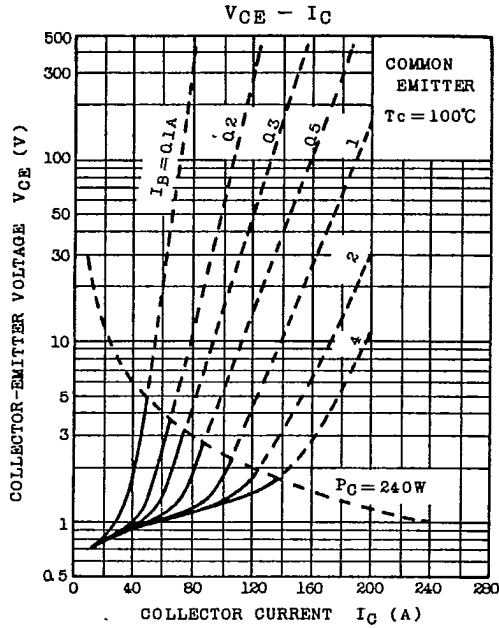
- 262 -



SEMICONDUCTOR

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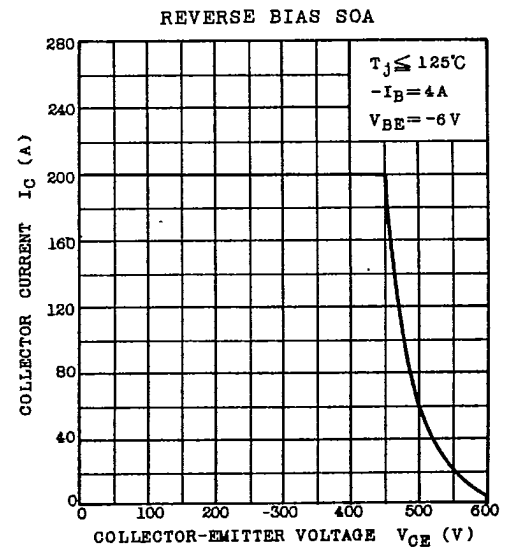
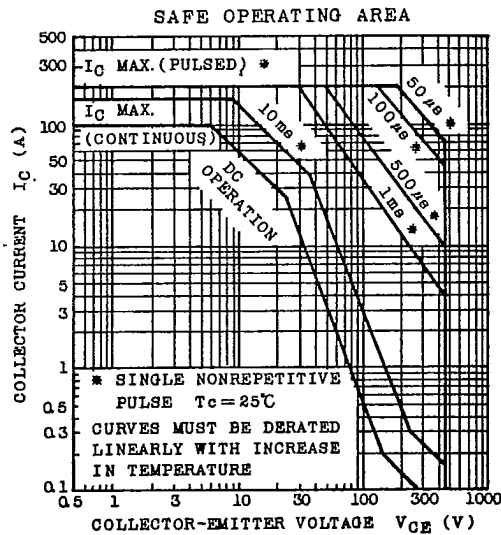
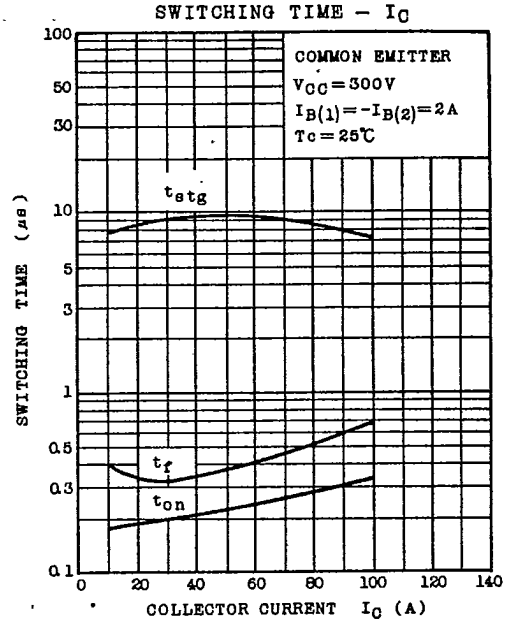
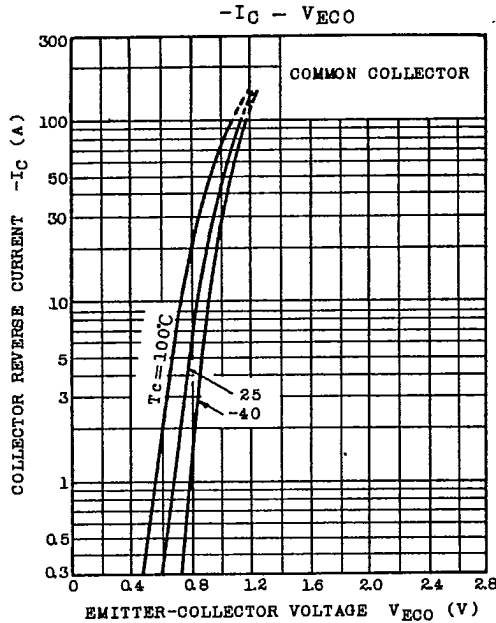
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SEMICONDUCTOR

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TOSHIBA CORPORATION

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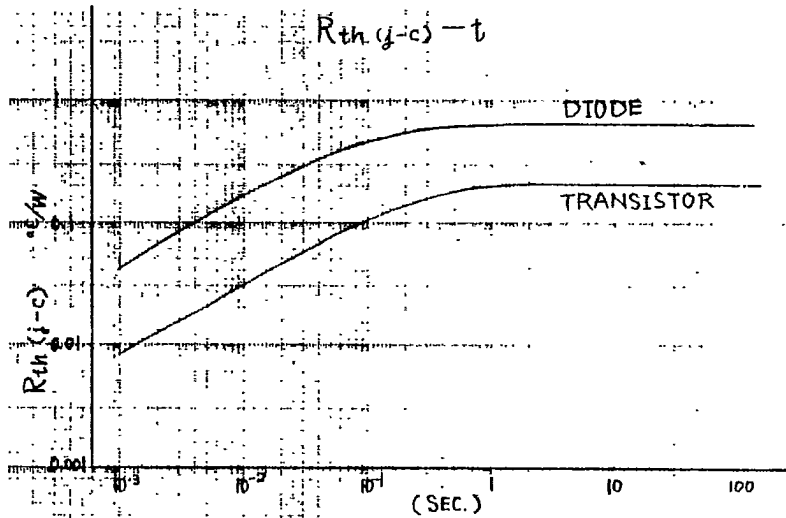
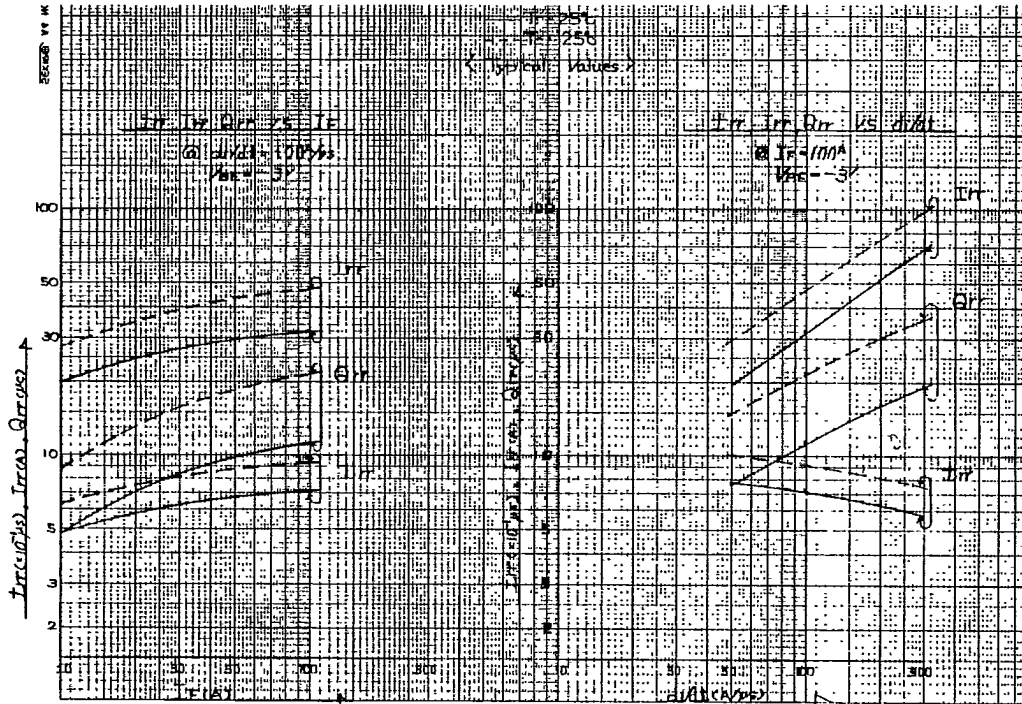


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