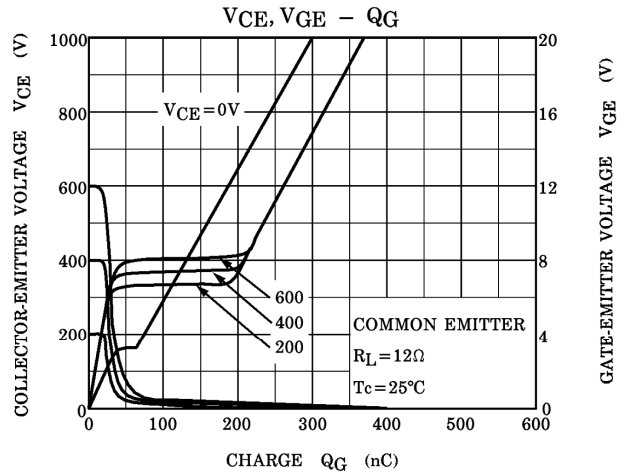
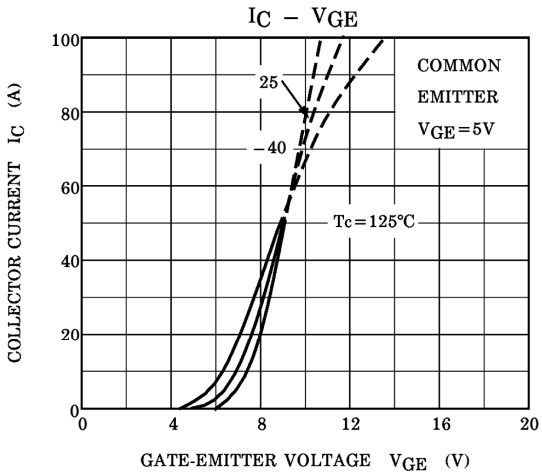
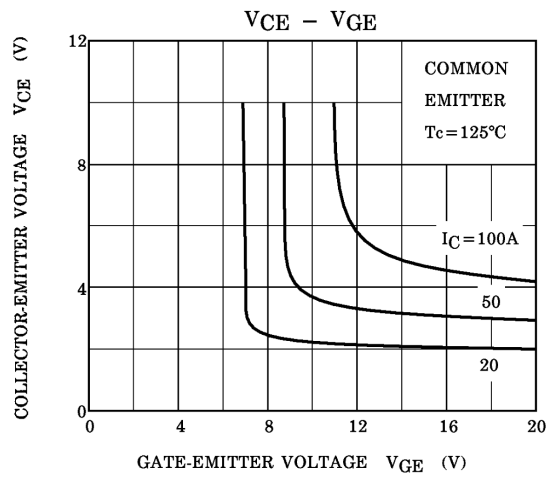
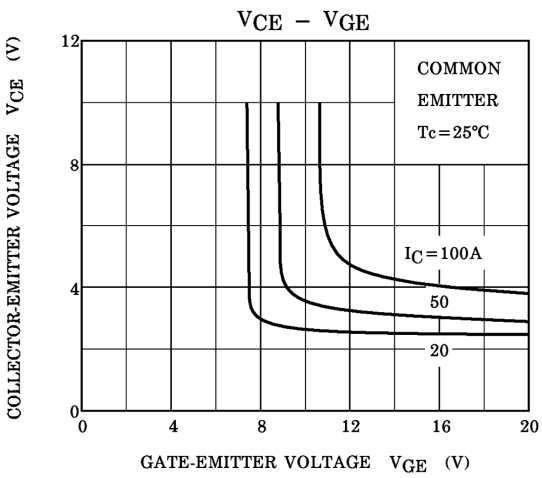
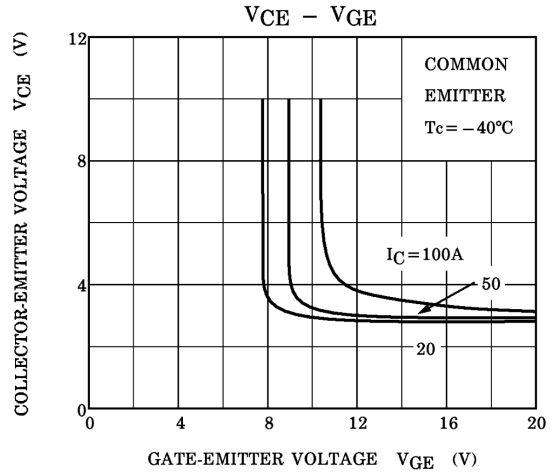
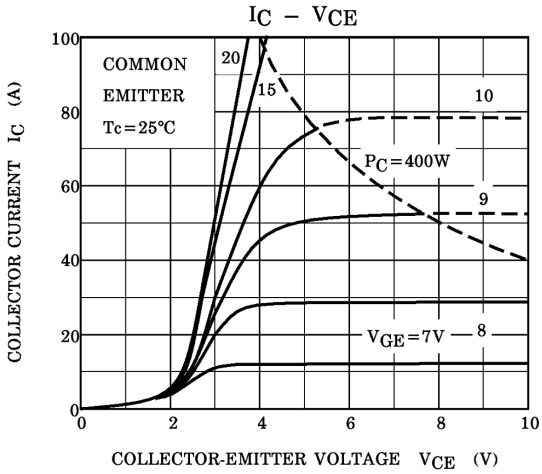
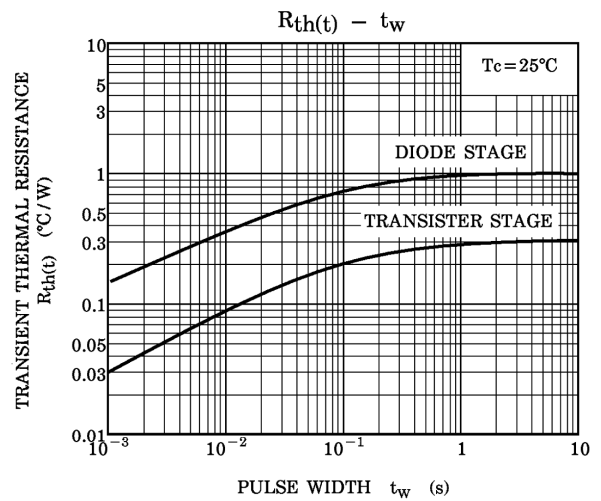
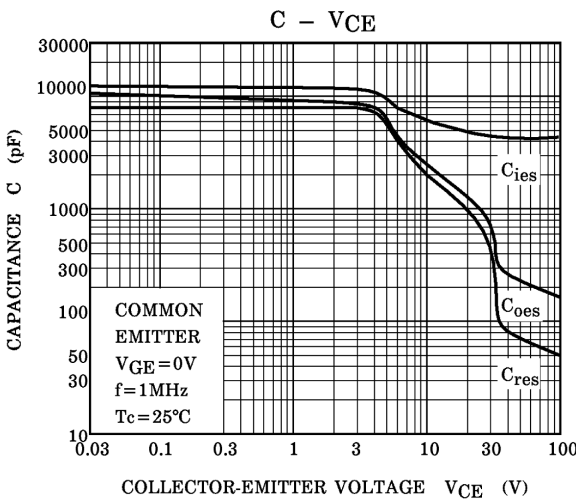
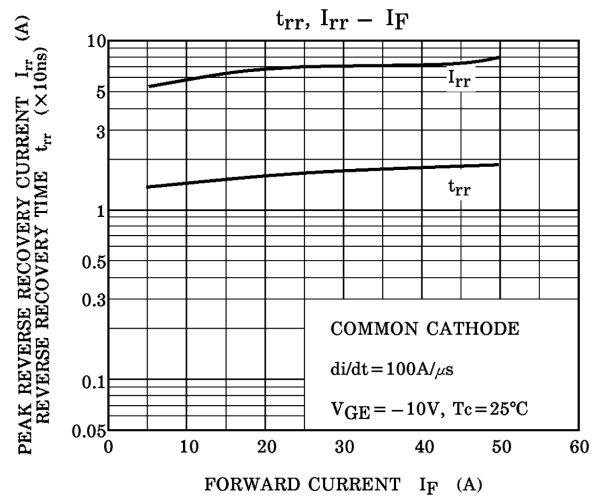
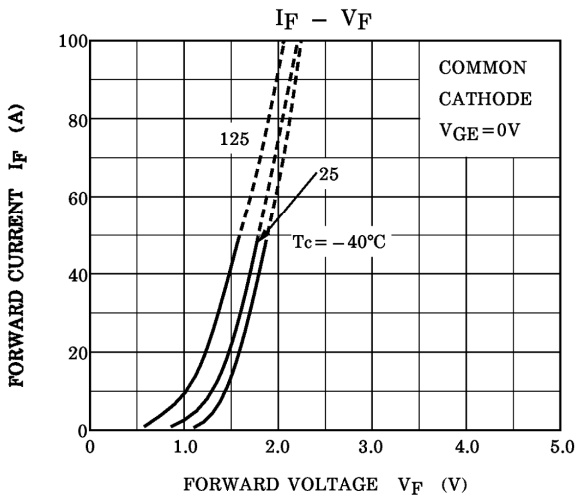
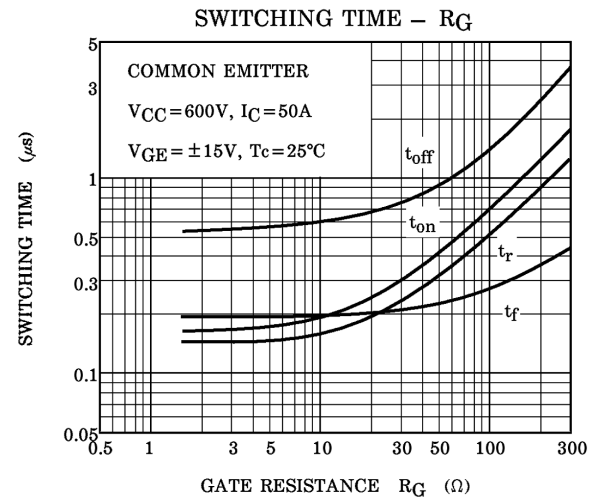
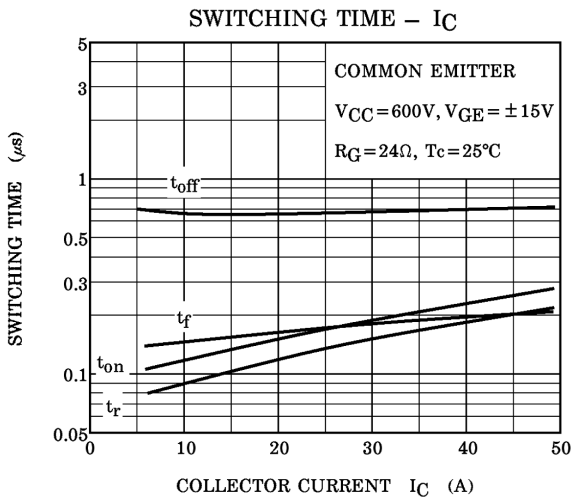
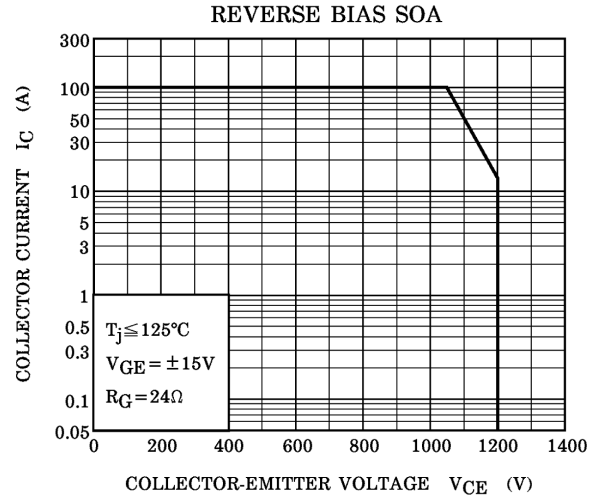
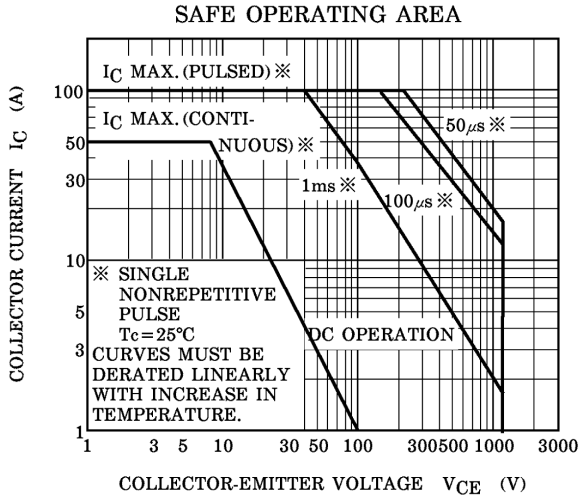


Electrical Characteristics (Ta = 25°C)

Characteristic		Symbol	Test Condition	Min.	Typ.	Max.	Unit
Gate leakage current		I_{GES}	$V_{GE} = \pm 20V, V_{CE} = 0$	—	—	± 10	μA
Collector cut-off current		I_{CES}	$V_{CE} = 1200V, V_{GE} = 0$	—	—	1.0	mA
Gate-emitter cut-off voltage		$V_{GE(off)}$	$I_C = 50mA, V_{CE} = 5V$	3.0	—	6.0	V
Collector-emitter saturation voltage		$V_{CE(sat)}$	$I_C = 50A, V_{GE} = 15V$	—	3.0	4.0	V
Input capacitance		C_{ies}	$V_{CE} = 10V, V_{GE} = 0,$ $f = 1MHz$	—	6000	—	pF
Switching time	Rise time	t_r		—	0.3	0.6	μs
	Turn-on time	t_{on}		—	0.4	0.8	
	Fall time	t_f		—	0.2	0.5	
	Turn-off time	t_{off}		—	0.8	1.5	
Forward voltage		V_F	$I_F = 50A, V_{GE} = 0$	—	2.0	2.5	V
Reverse recovery time		t_{rr}	$I_F = 50A, V_{GE} = -10V$ $di / dt = 100A / \mu s$	—	0.25	0.5	μs
Thermal resistance		$R_{th(j-c)}$	Transistor	—	—	0.31	$^{\circ}C / W$
			Diode	—	—	1.0	







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