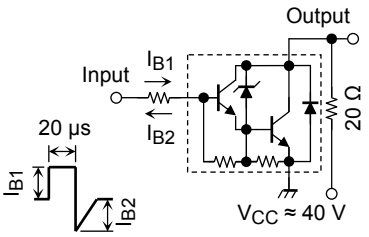
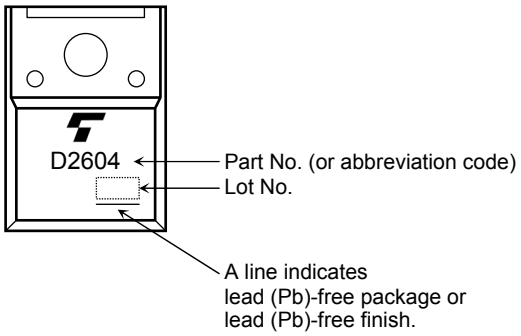
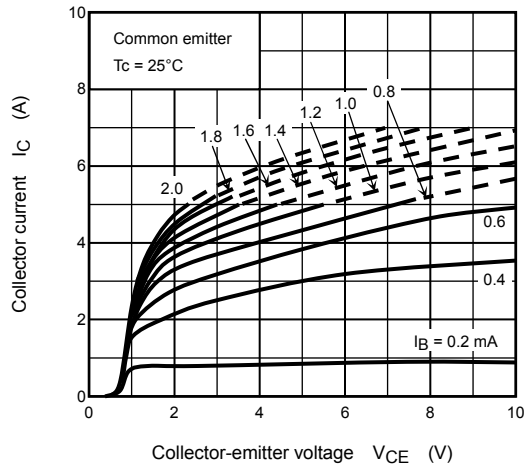
Electrical Characteristics (Tc = 25°C)

Characteristics		Symbol	Test Condition	Min	Typ.	Max	Unit
Collector cut-off current		I_{CBO}	V_{CB} = 90 V, I_E = 0	—	—	100	μA
Emitter cut-off current		I_{EBO}	V_{EB} = 6 V, I_C = 0	0.75	—	3.0	μA
Collector-emitter breakdown voltage		$V_{(BR)\ CEO}$	I_C = 10 mA, I_B = 0	95	110	125	V
DC current gain		$h_{FE\ (1)}$	V_{CE} = 3 V, I_C = 2 A	2000	—	15000	
		$h_{FE\ (2)}$	V_{CE} = 3 V, I_C = 5 A	1000	—	—	
Collector-emitter saturation voltage		$V_{CE\ (sat)}$	I_C = 2 A, I_B = 4 mA	—	0.9	1.5	V
Base-emitter saturation voltage		$V_{BE\ (sat)}$	I_C = 2 A, I_B = 4 mA	—	1.5	2.5	V
Switching time	Turn-on time	t_{on}	 I_{B1} = −I_{B2} = 4 mA, duty cycle ≤ 1%	—	0.5	—	μs
	Storage time	t_{stg}		—	5.0	—	
	Fall time	t_f		—	0.7	—	

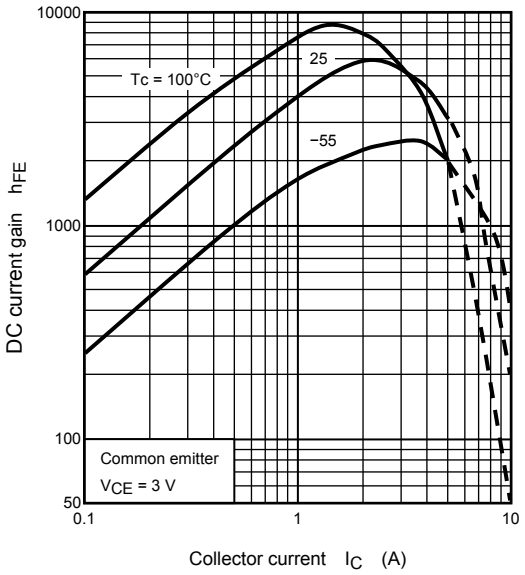
Marking



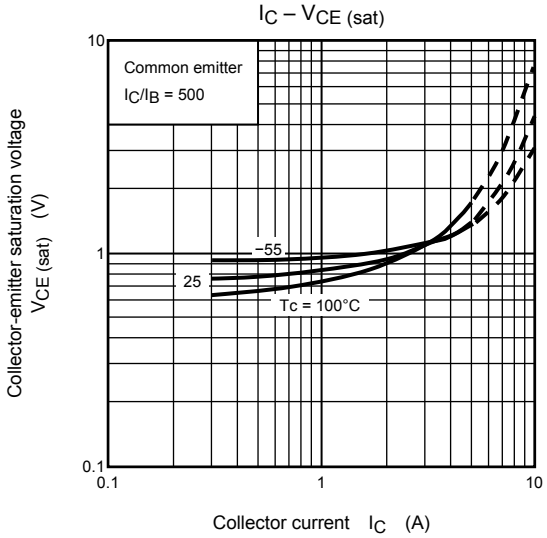
$V_{CE} - I_C$



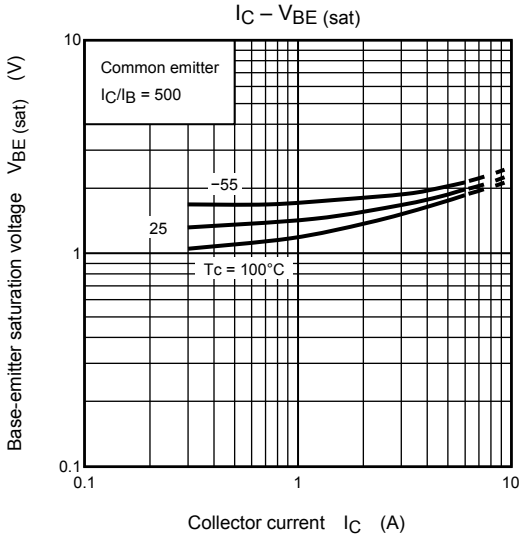
$h_{FE} - I_C$



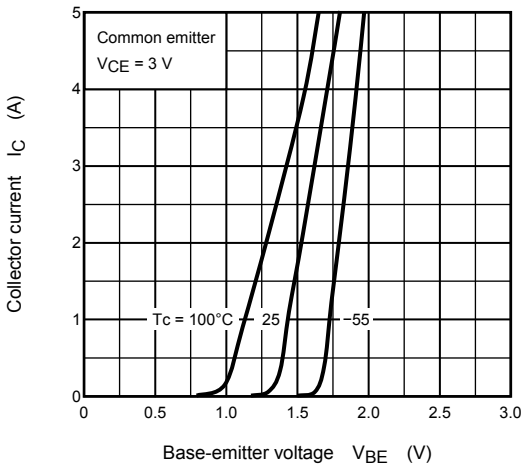
$I_C - V_{CE\ (sat)}$



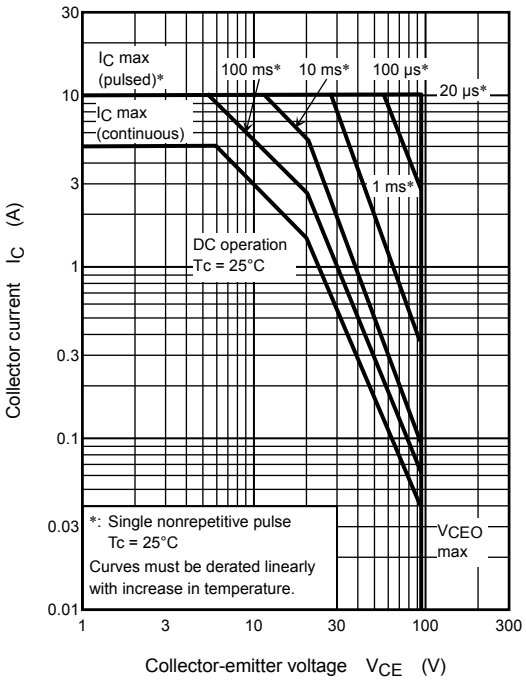
$I_C - V_{BE\ (sat)}$



$I_C - V_{BE}$



Safe Operating Area



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20070701-EN

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