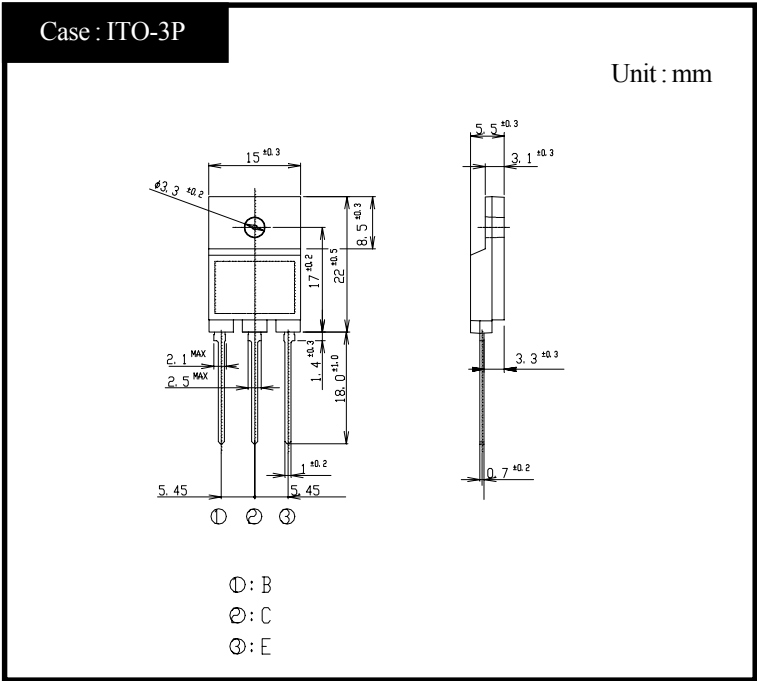


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6A NPN

OUTLINE DIMENSIONS



RATINGS

●Absolute Maximum Ratings

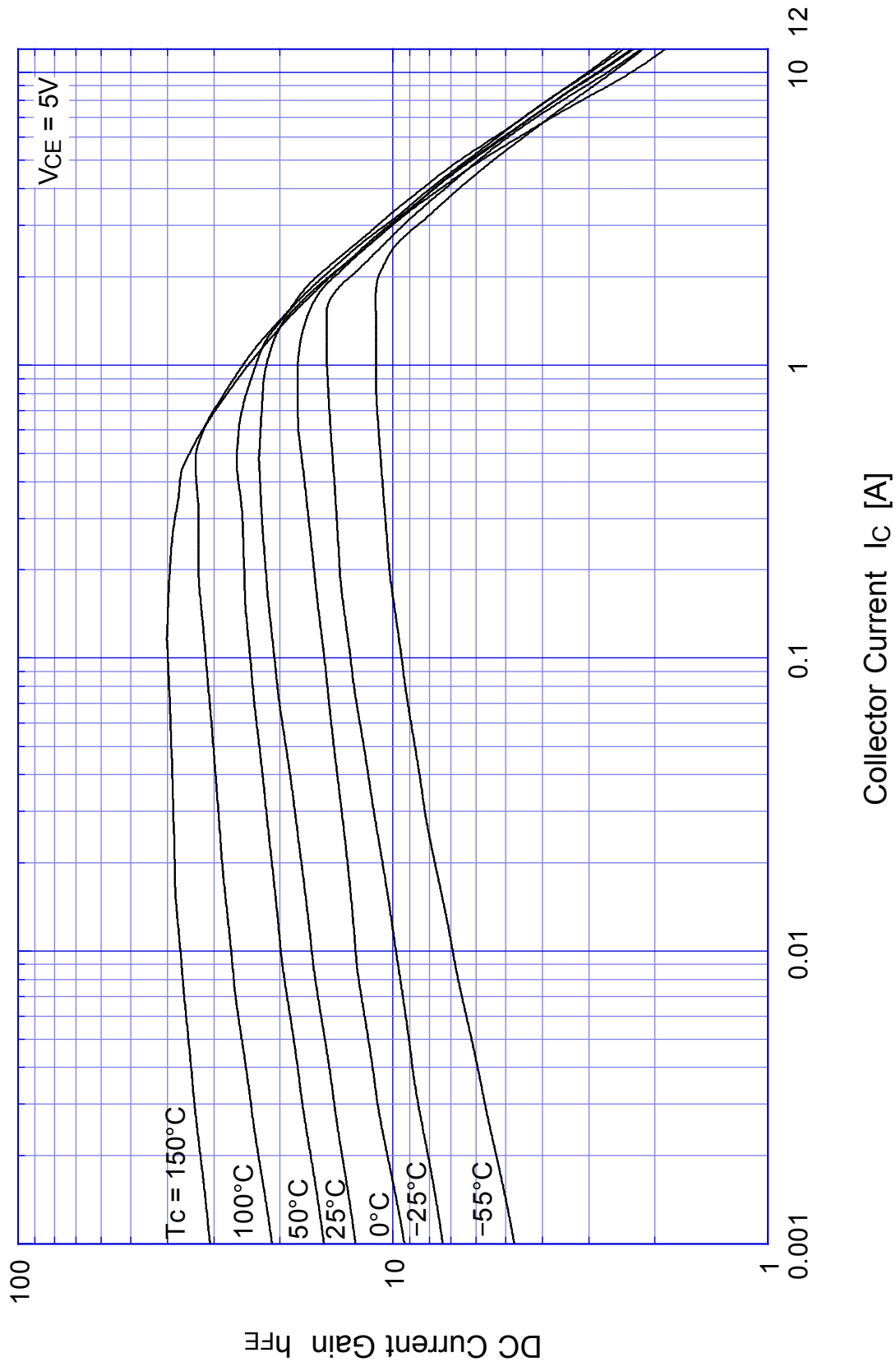
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-55~150	℃
Junction Temperature	Tj		150	℃
Collector to Base Voltage	V _{CBO}		1500	V
Collector to Emitter Voltage	V _{CEO}		800	V
Emitter to Base Voltage	V _{EBO}		7	V
Collector Current DC	I _C		6	A
Collector Current Peak	I _{CP}		12	
Base Current DC	I _B		3	
Base Current Peak	I _{BP}		6	A
Total Transistor Dissipation	P _T		65	W
Dielectric Strength	Vdis	Terminals to case, AC 1 minute	2	kV
Mounting Torque	TOR	(Recommended torque)	0.8(0.5)	N•m

●Electrical Characteristics (Tc=25℃)

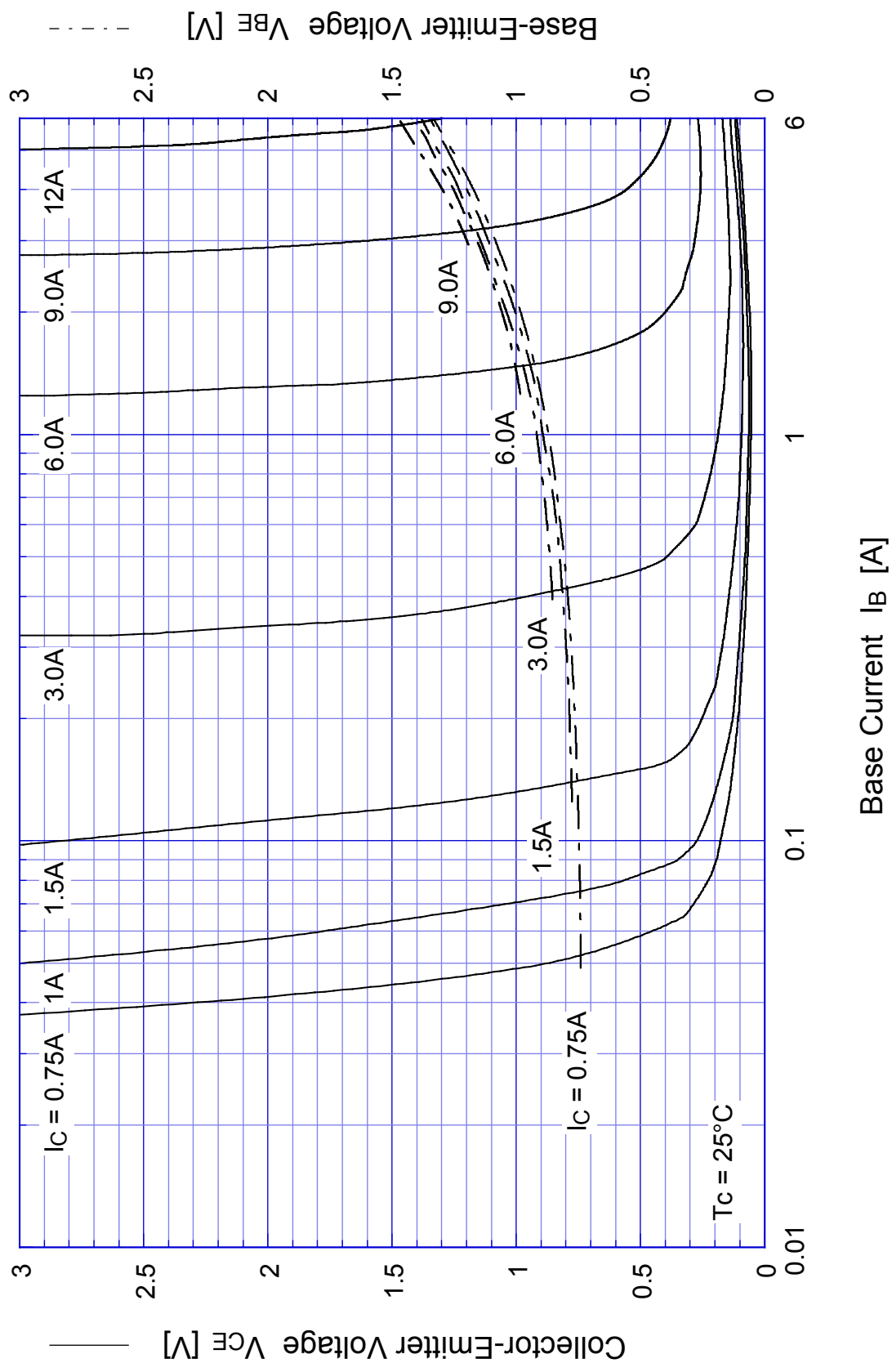
Item	Symbol	Conditions	Ratings	Unit
Collector to Emitter Sustaining Voltage	V _{CEO} (sus)	I _C = 0.2A	Min 800	V
Collector to Base Voltage	V _{CBO}	I _{CB} = 1mA	Min 1500	
Collector Cutoff Current	I _{CBO}	V _{CB} = 1200V	Max 0.1	mA
	I _{CEO}	rated V _{CEO}	Max 0.1	
Emitter Cutoff Current	I _{EBO}	rated V _{EBO}	Max 0.1	mA
DC Current Gain	h _{FE}	V _{CE} = 5V, I _C = 1A	Min 15	
	h _{FEL}	V _{CE} = 5V, I _C = 1mA	Min 7	
Collector to Emitter Saturation Voltage	V _{CE} (sat)	I _C = 3A	Max 0.5	V
Base to Emitter Saturation Voltage	V _{BE} (sat)	I _B = 0.6A	Max 1.5	V
Thermal Resistance	θ _{jc}	Junction to case	Max 1.92	℃/W
Transition Frequency	f _T	V _{CE} = 10V, I _C = 0.6A	TYP 8	MHz
Turn on Time	ton	I _C = 3A	Max 0.5	μ s
Storage Time	ts	I _{B1} = 0.6A, I _{B2} = 1.2A	Max 3.5	
Fall Time	tf	R _L = 85 Ω, V _{BB2} = 4V	Max 0.3	

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$h_{FE} - I_C$

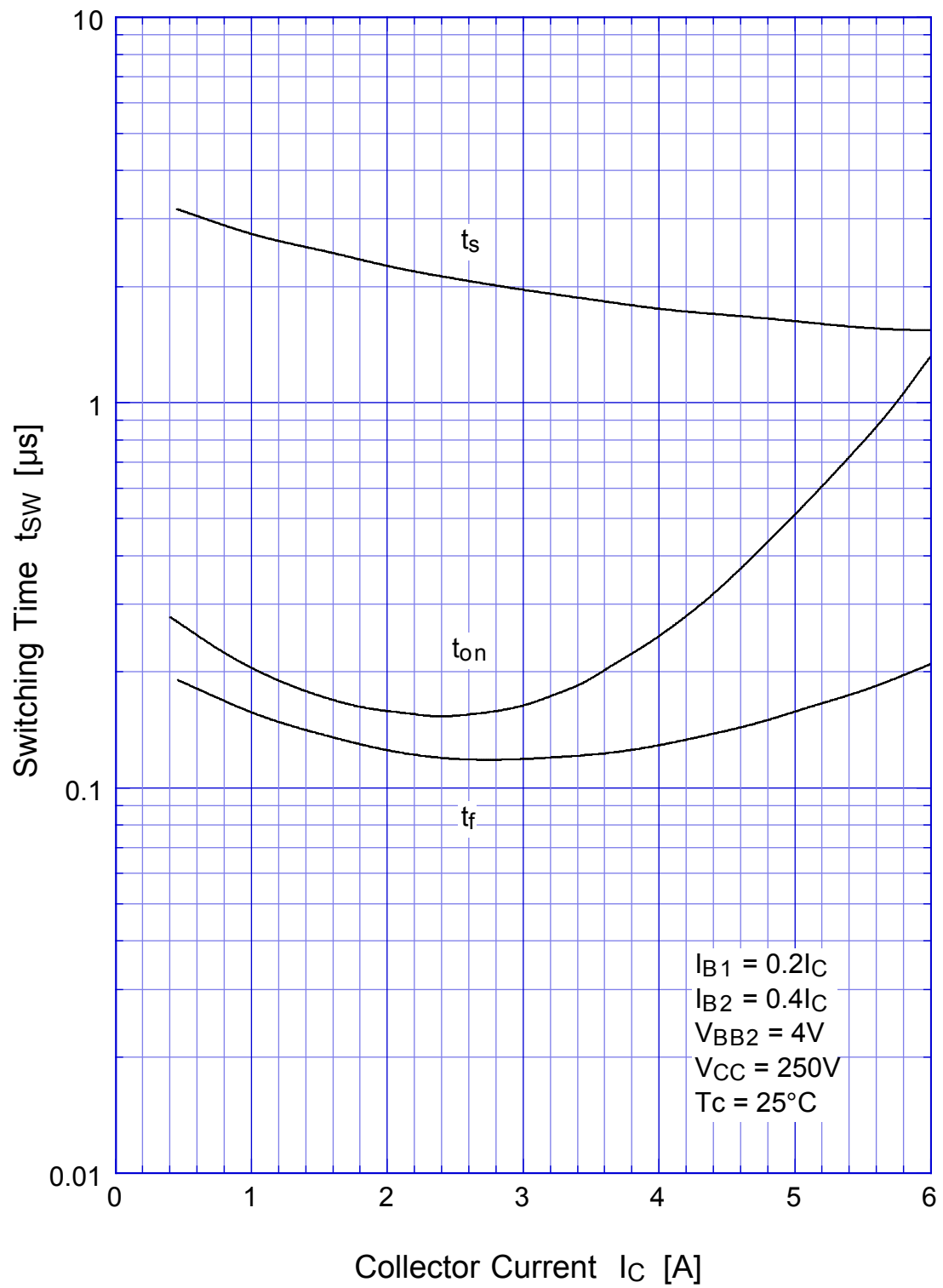


2SC4941 Saturation Voltage



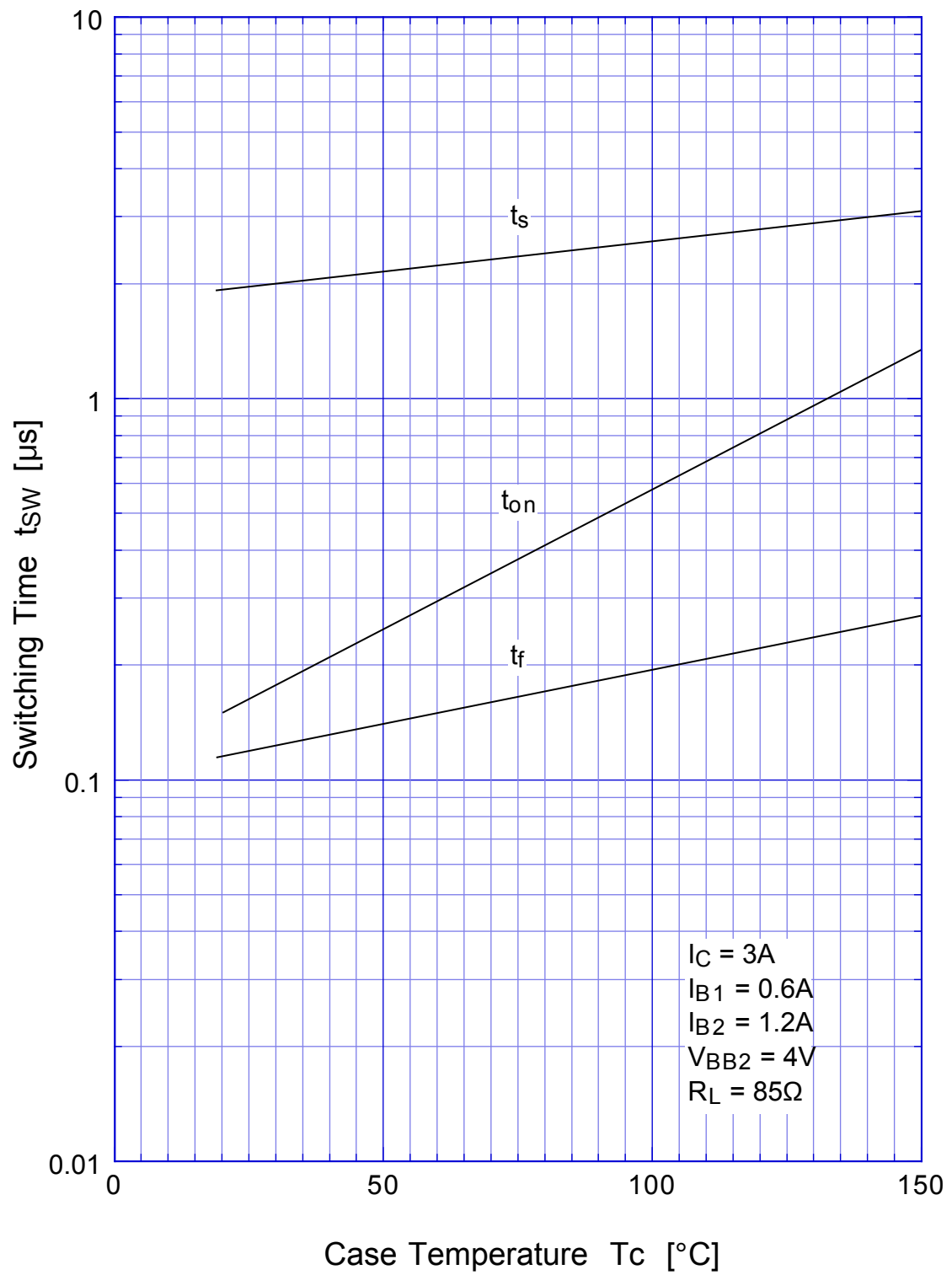
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Switching Time - I_C

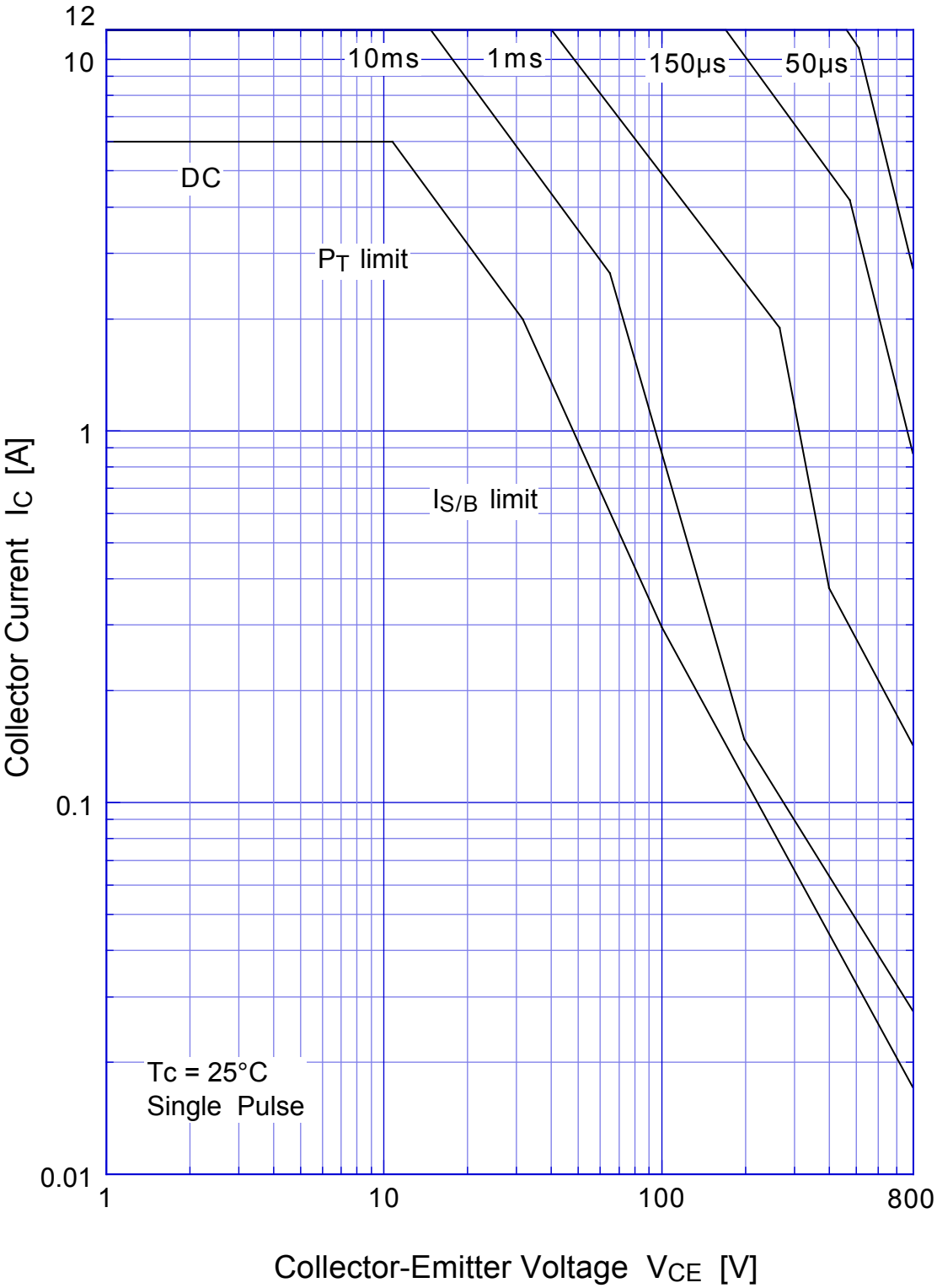


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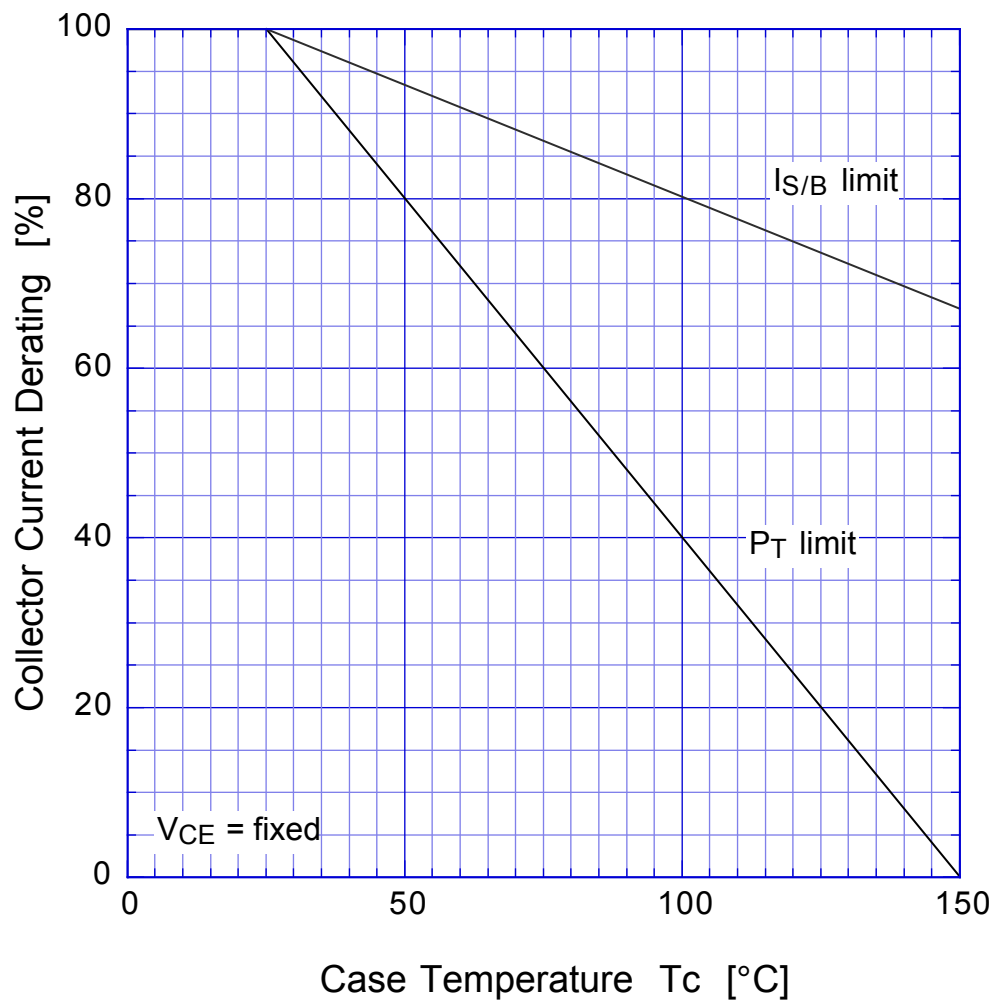
Switching Time - T_c



2SC4941 Forward Bias SOA

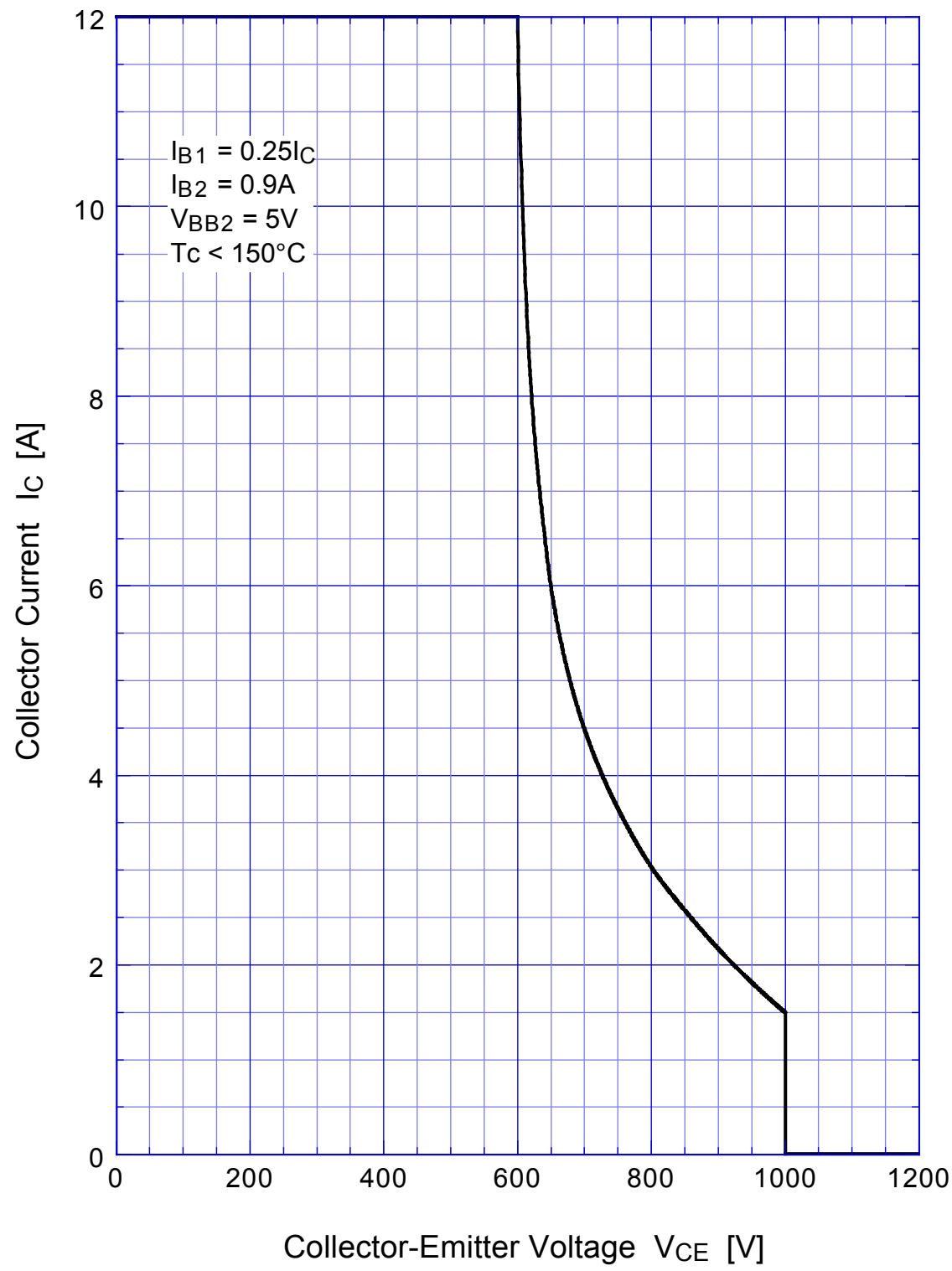


2SC4941 Collector Current Derating



2SC4941

Reverse Bias SOA



2SC4941 Transient Thermal Impedance

