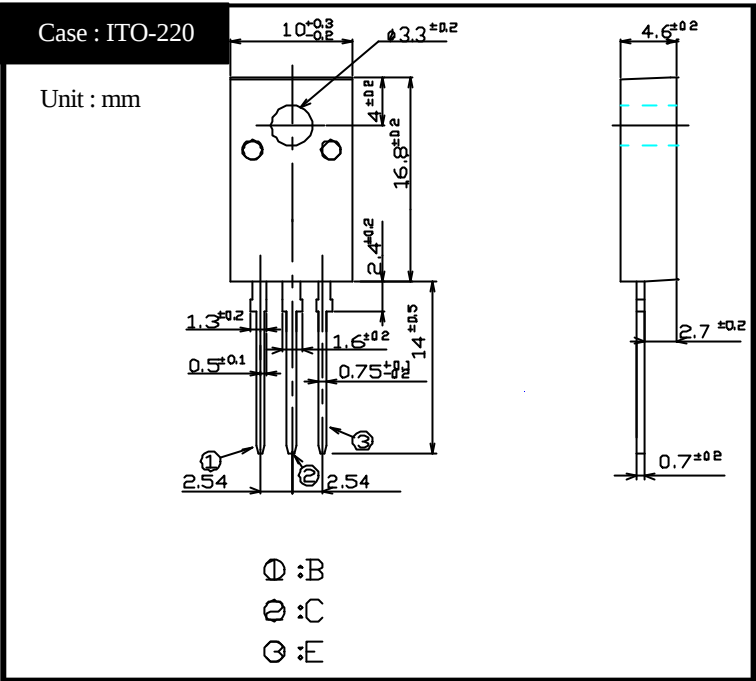


2SA1599

(TP10T4)

-10A PNP

OUTLINE DIMENSIONS



RATINGS

• Absolute Maximum Ratings

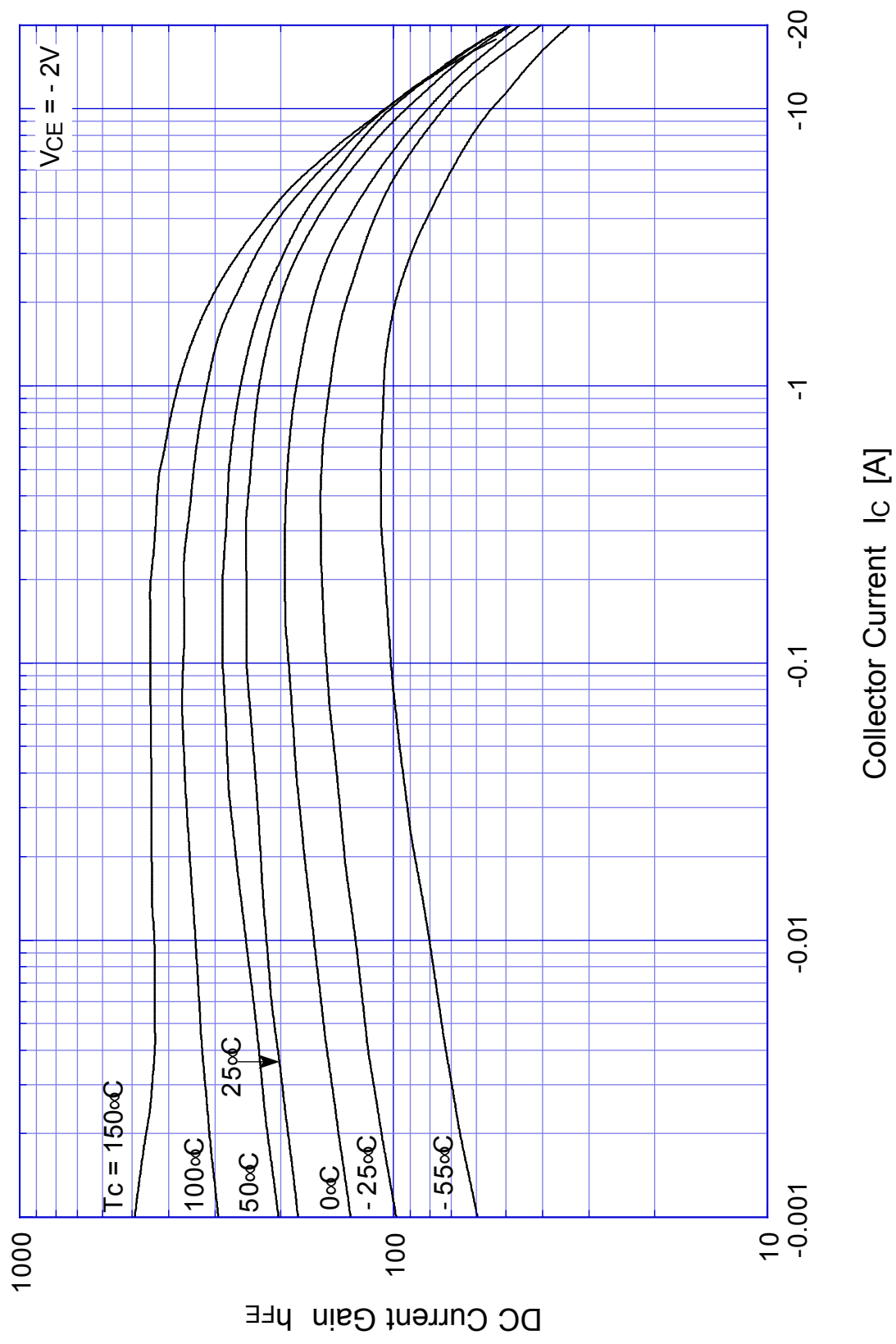
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-55 ~ 150	
Junction Temperature	Tj		150	
Collector to Base Voltage	V _{CBO}		-60	V
Collector to Emitter Voltage	V _{CEO}		-40	V
Emitter to Base Voltage	V _{EBO}		-7	V
Collector Current DC	I _C		-10	A
Collector Current Peak	I _{CP}		-20	A
Base Current DC	I _B		-1.5	A
Base Current Peak	I _{BP}		-2	A
Total Transistor Dissipation	P _T	Tc = 25	25	W
Dielectric Strength	Vdis	Terminal to case, AC 1 minute	2	kV
Mounting Torque	TOR	(Recommended torque : 0.3N·m)	0.5	N·m

• Electrical Characteristics (Tc=25)

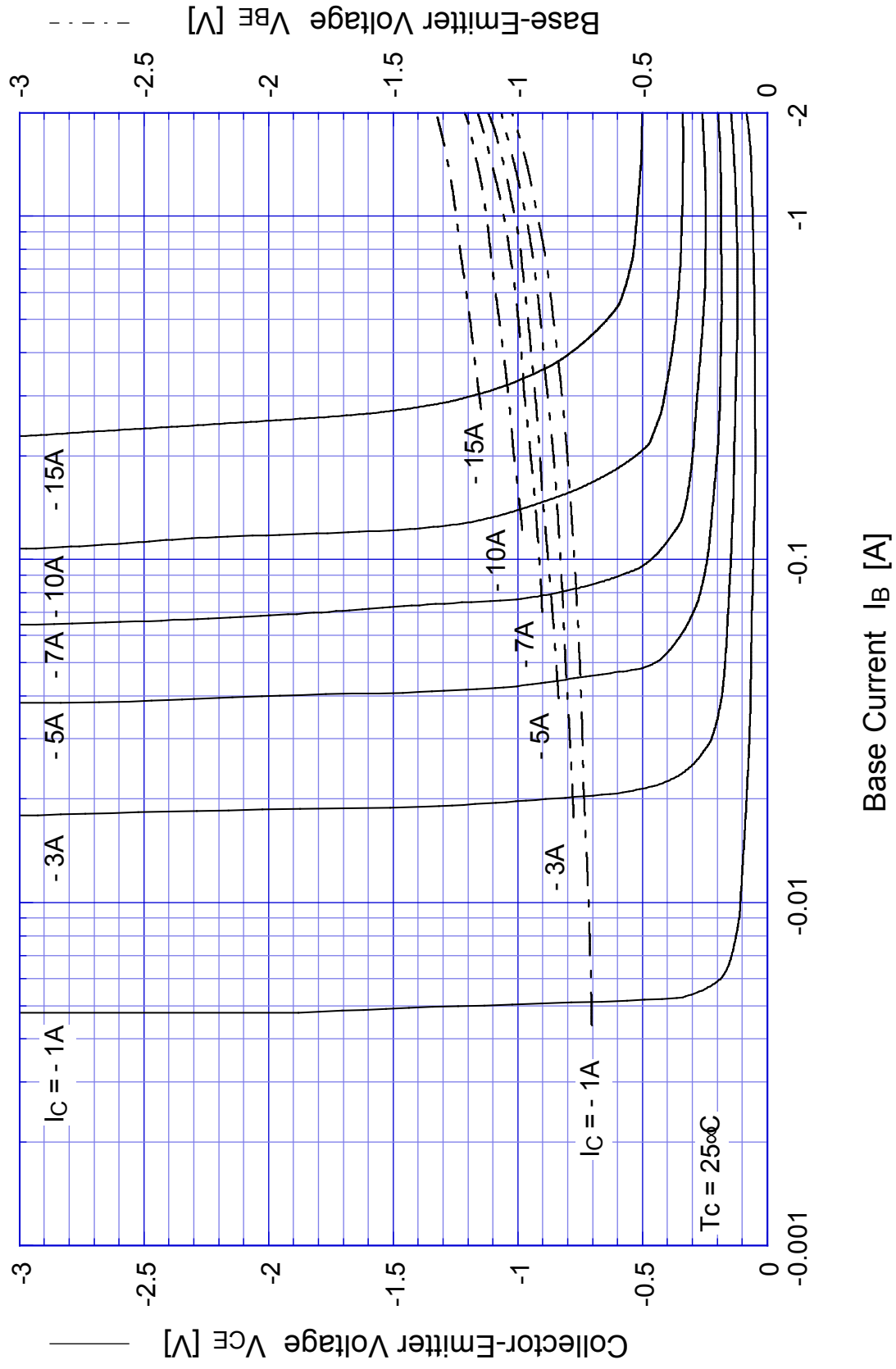
Item	Symbol	Conditions	Ratings	Unit
Collector to Emitter Sustaining Voltage	V _{CEO} (sus)	I _C = -0.1A	Min -40	V
Collector Cutoff Current	I _{CBO}	At rated Voltage	Max -0.1	mA
			Max -0.1	
Emitter Cutoff Current	I _{EBO}	At rated Voltage	Max -0.1	mA
DC Current Gain	h _{FE}	V _{CE} = -2V, I _C = -5A	Min 70	
Collector to Emitter Saturation Voltage	V _{CE} (sat)	I _C = -5A	Max -0.3	V
Base to Emitter Saturation Voltage	V _{BE} (sat)	I _B = -0.25A	Max -1.2	V
Thermal Resistance	θ jc	Junction to case	Max 5	/W
Transition Frequency	f _T	V _{CE} = -10V, I _C = -1A	TYP 50	MHz
Turn on Time	ton	I _C = -5A I _{B1} = -0.5A, I _{B2} = -0.5A R _L = 5Ω, V _{BB2} = -4V	Max 0.3	μ s
Storage Time	ts		Max 1.5	
Fall Time	tf		Max 0.5	

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$h_{FE} - I_C$

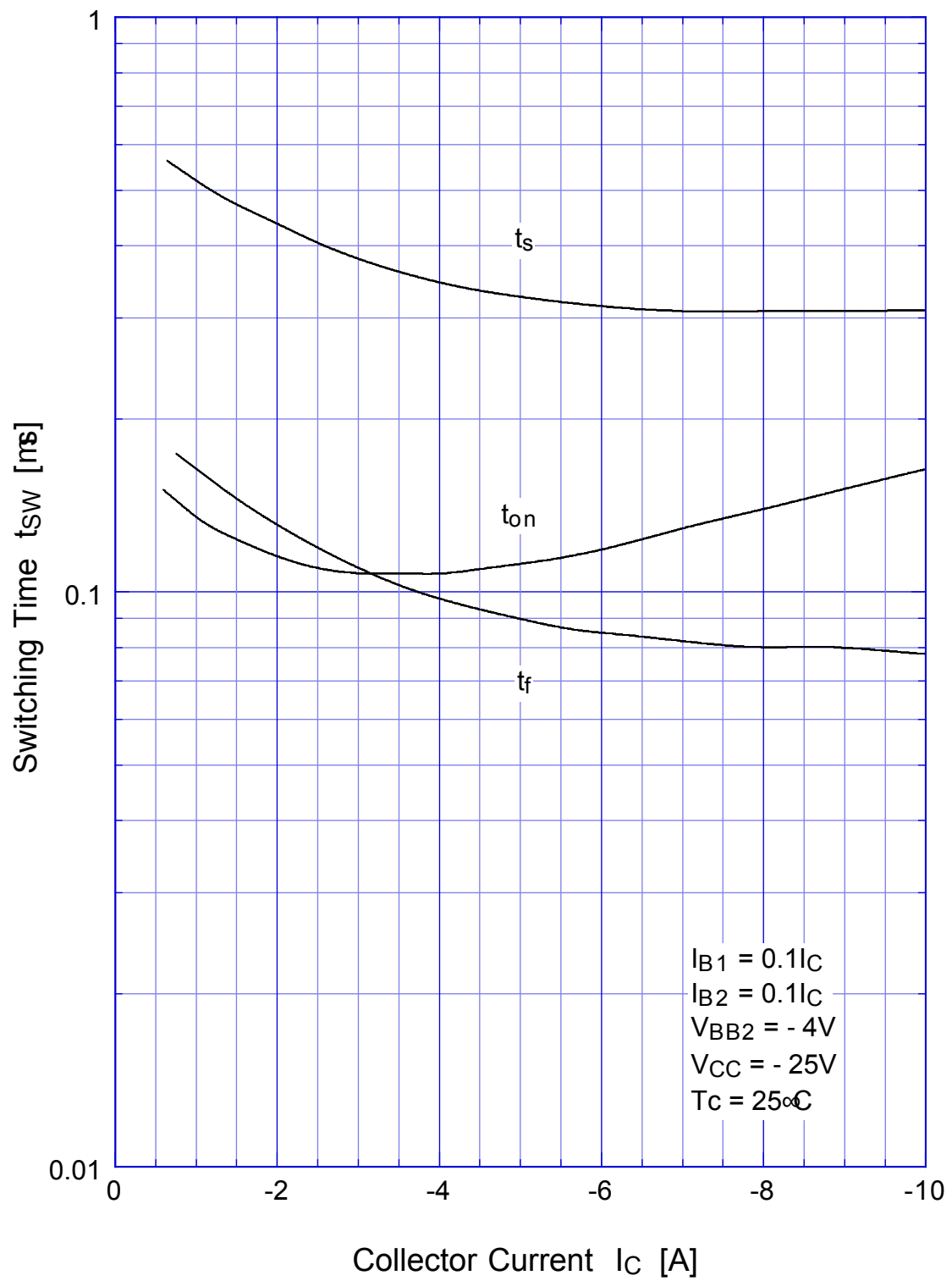


2SA1599 Saturation Voltage



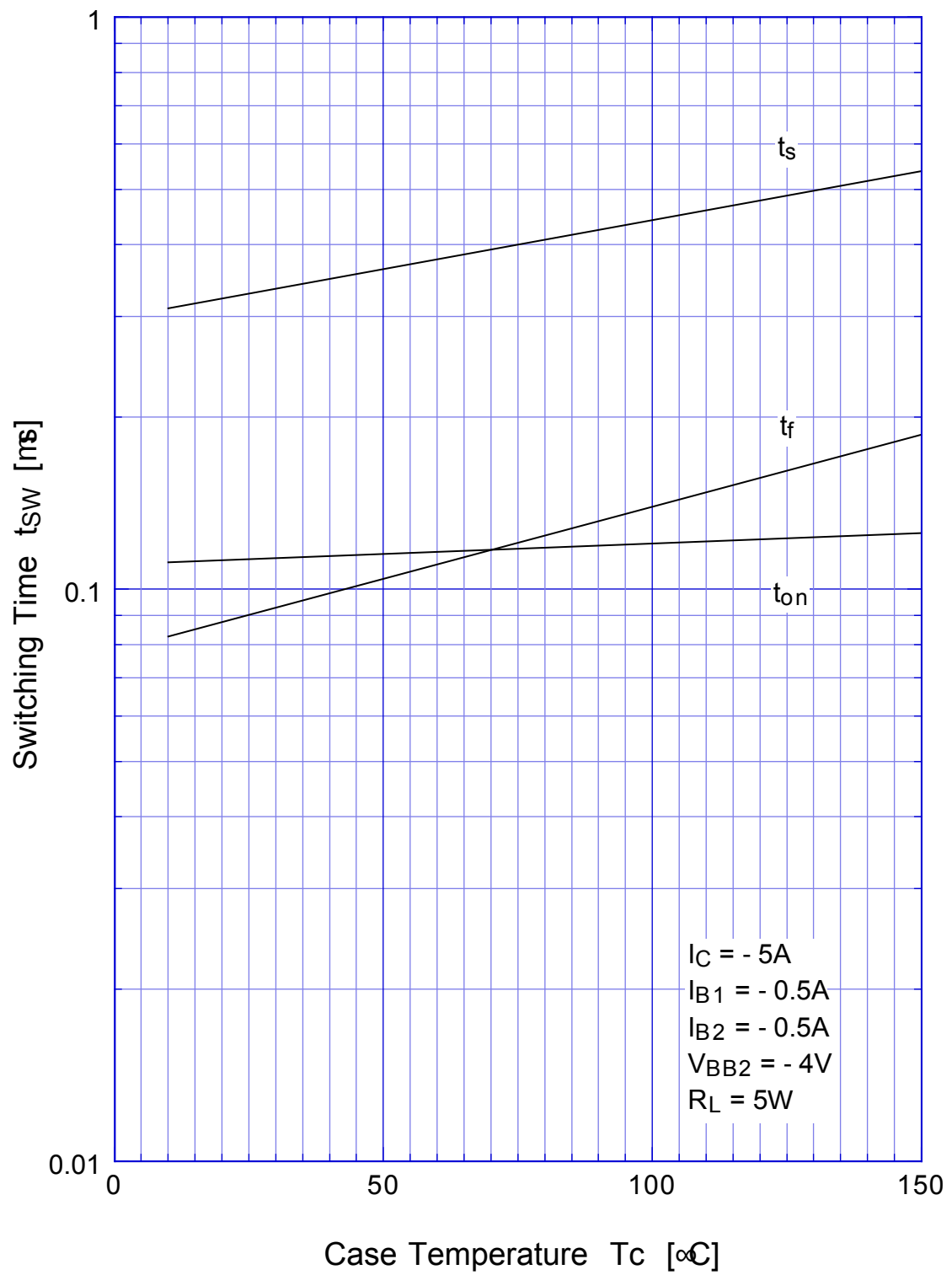
2SA1599

Switching Time - I_C

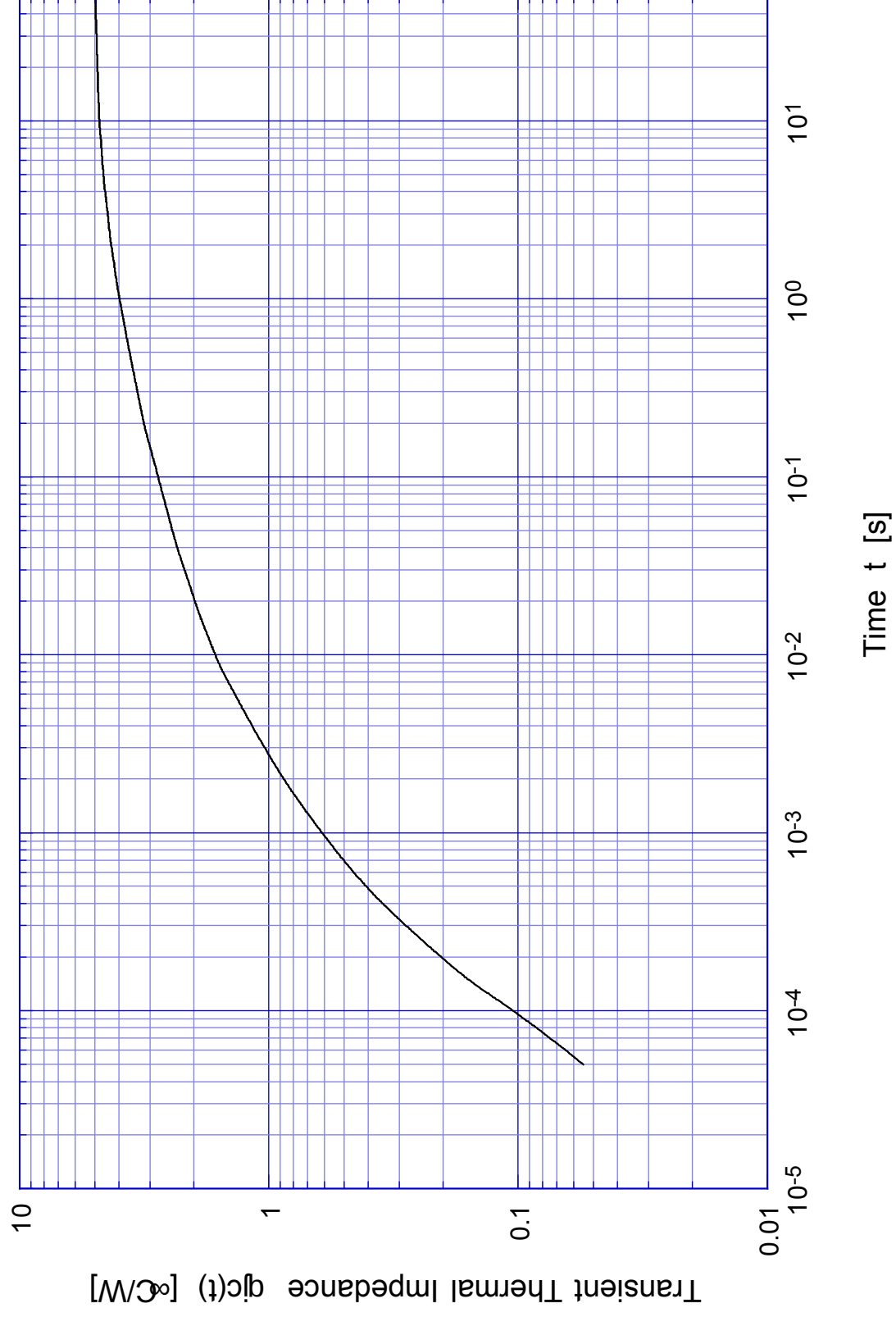


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Switching Time - T_c

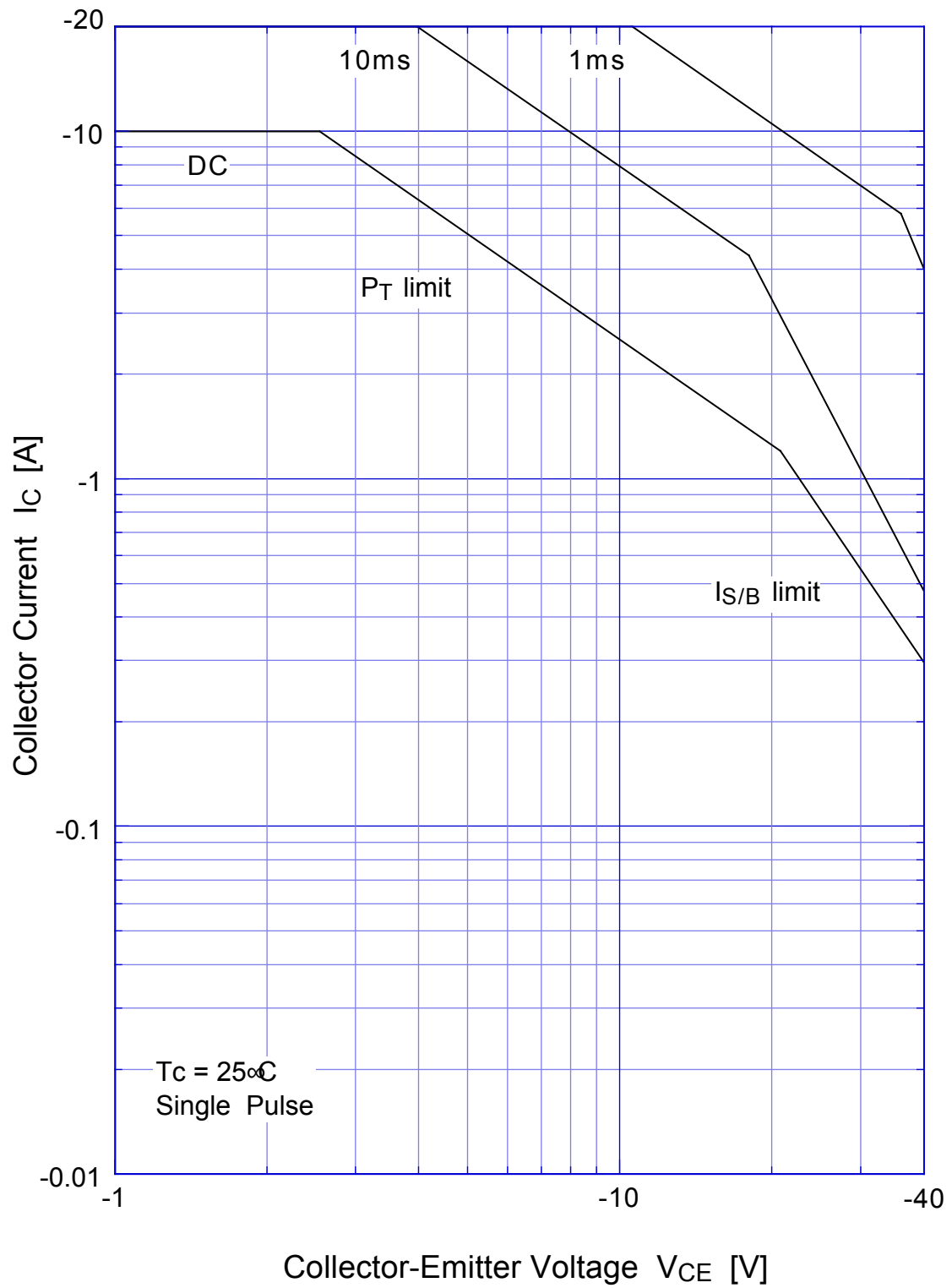


2SA1599 Transient Thermal Impedance



2SA1599

Forward Bias SOA



2SA1599 Collector Current Derating

