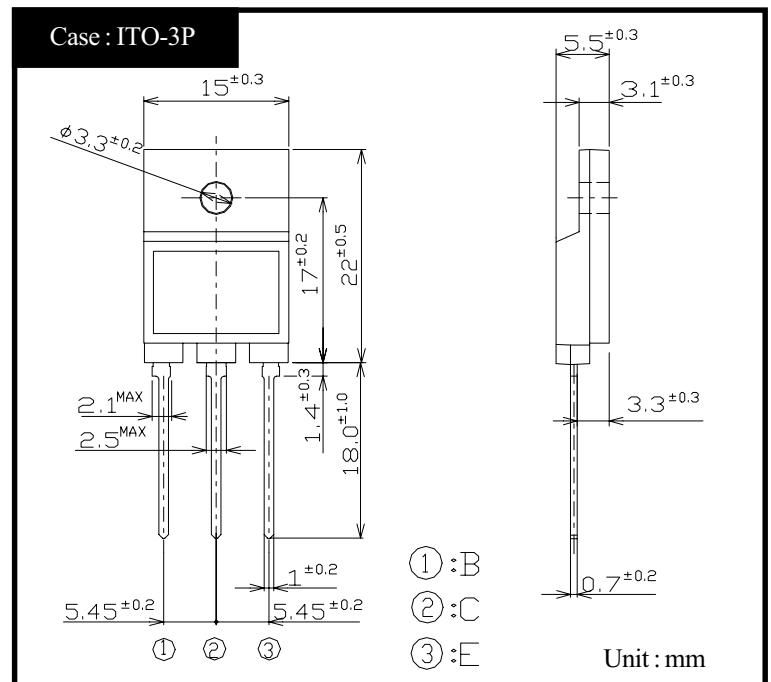


Darlington Transistor

2SB1448
(TP15J10)

-15A PNP

OUTLINE DIMENSIONS



RATINGS

● Absolute Maximum Ratings

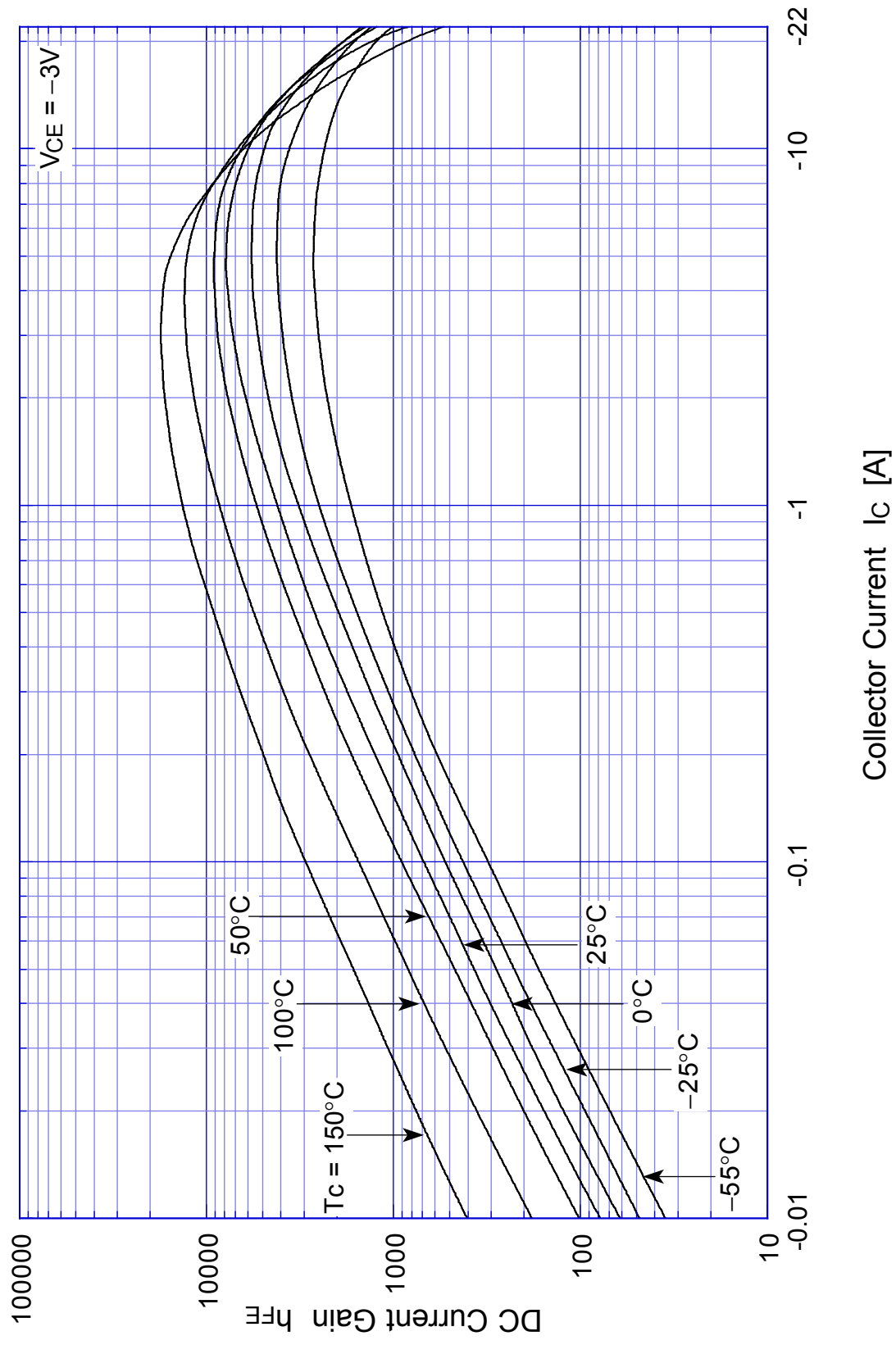
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T _{stg}		-55~+150	°C
Junction Temperature	T _j		+150	°C
Collector to Base Voltage	V _{CBO}		-100	V
Collector to Emitter Voltage	V _{CEO}		-100	V
Emitter to Base Voltage	V _{EBO}		-7	V
Collector Current DC	I _C		-15	A
Collector Current Peak	I _{CP}		-22	A
Base Current DC	I _B		-1	A
Base Current Peak	I _{BP}		-2	A
Total Transistor Dissipation	P _T	T _C = 25°C	65	W
Dielectric Strength	V _{dis}	Terminals to case AC 1 minute	2	kV
Mounting Torque	TOR	(Recommended torque : 0.5N·m)	0.8	N·m

●Electrical Characteristics (Tc=25°C)

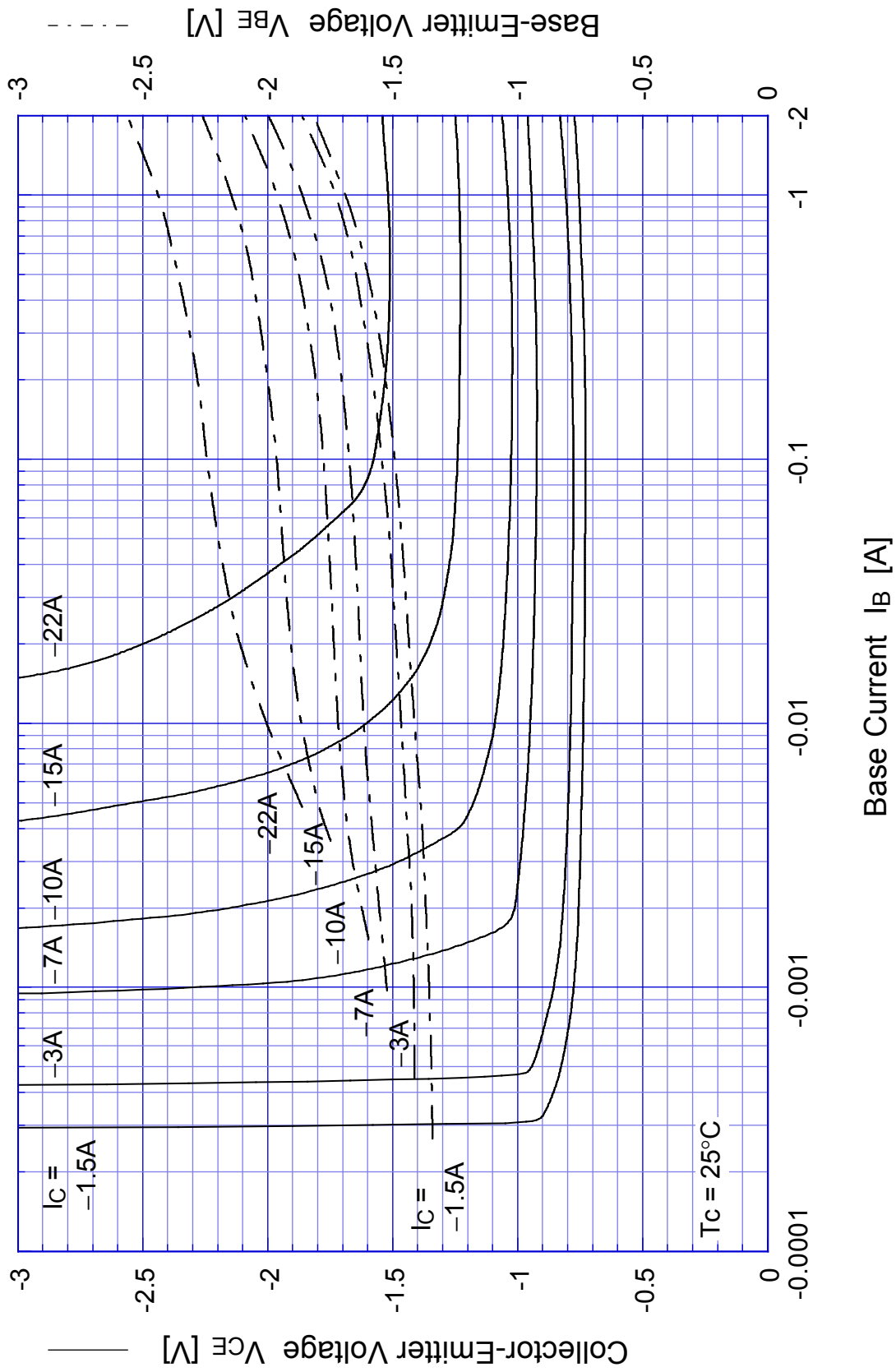
Item	Symbol	Conditions	Ratings	Unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = -100V$	Max -0.1	mA
	I_{CEO}	$V_{CE} = -100V$	Max -0.1	
Emitter Cutoff Current	I_{EBO}	$V_{EB} = -7V$	Max -5	mA
DC Current Gain	h_{FE}	$V_{CE} = -3V, I_C = -10A$	Min 1,500	
			Max 15,000	
Collector to Emitter Saturation Voltage	$V_{CE}(sat)$	$I_C = -10A$	Max -1.5	V
Base to Emitter Saturation Voltage	$V_{BE}(sat)$	$I_B = -20mA$	Max -2.0	V
Thermal Resistance	θ_{jc}	Junction to case	Max 1.92	$^{\circ}C/W$
Transition Frequency	f_T	$V_{CE} = -10V, I_C = -1.5A$	TYP 20	MHz
Turn on Time	t_{on}	$I_C = -15A$ $I_{B1} = I_{B2} = -20mA$ $R_L = 2\Omega$	Max 1	μs
Storage Time	t_s		Max 4	
Fall Time	t_f		Max 2	

2SB1448

$h_{FE} - I_C$

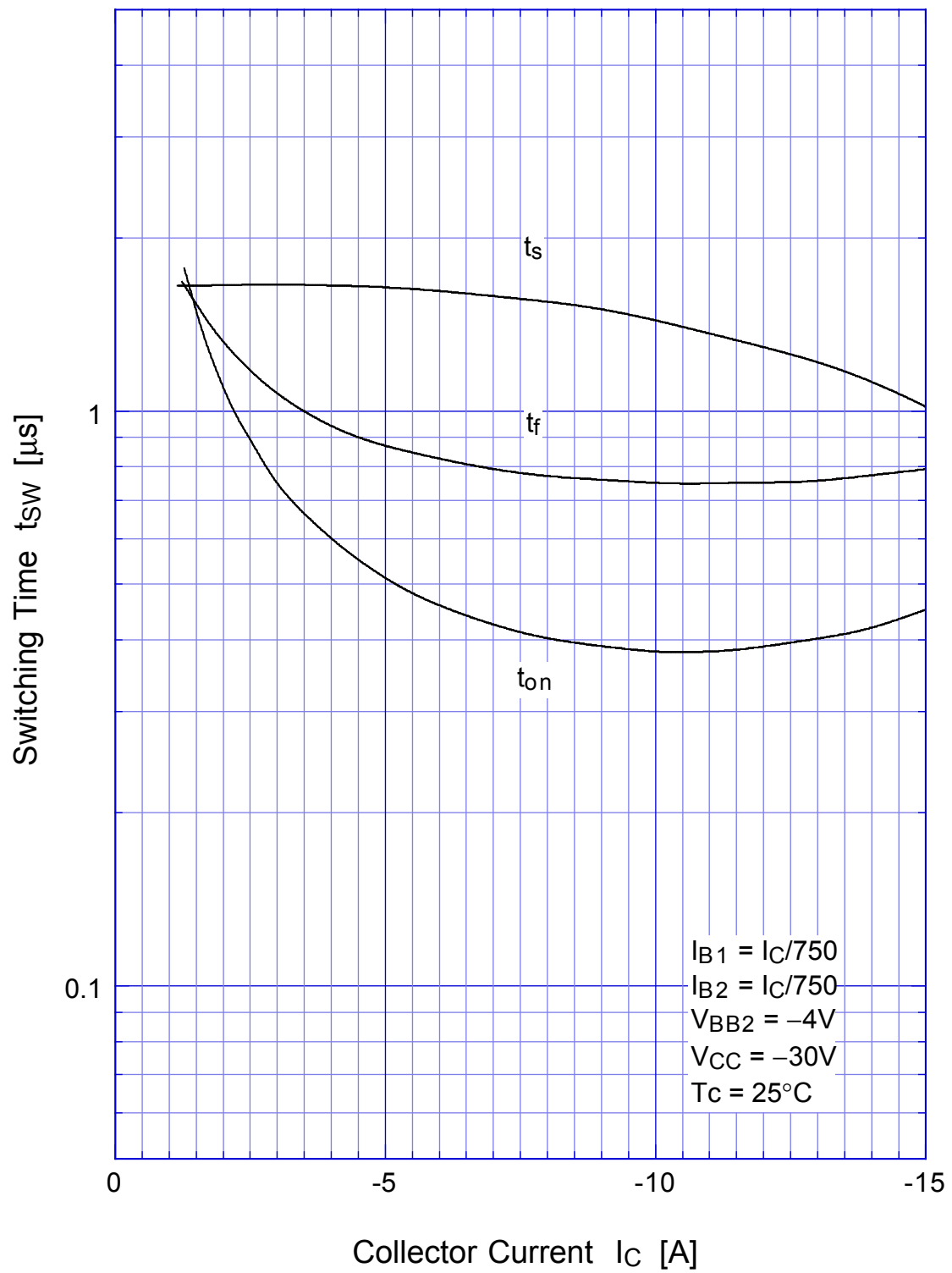


2SB1448 Saturation Voltage



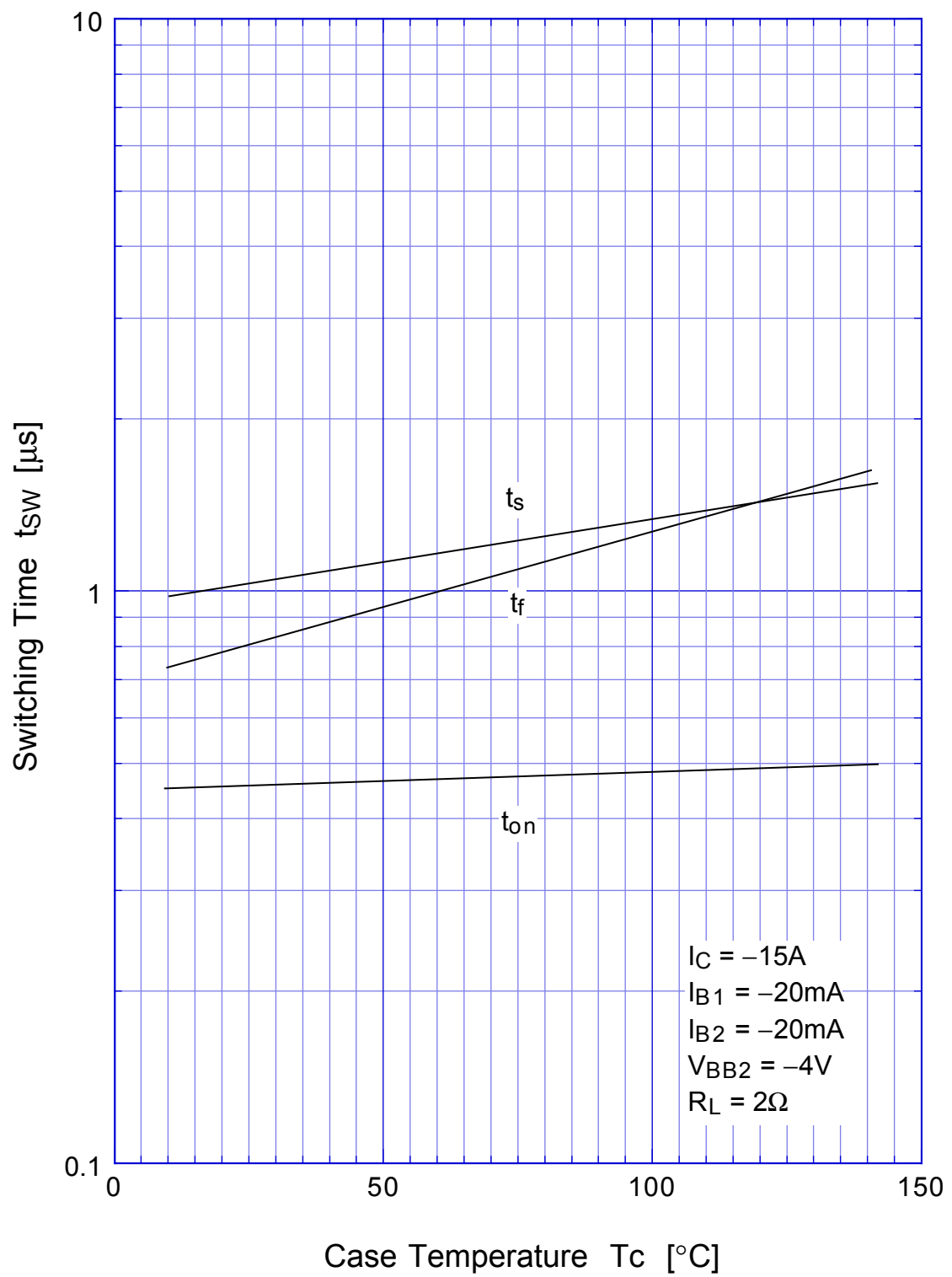
2SB1448

Switching Time - I_C

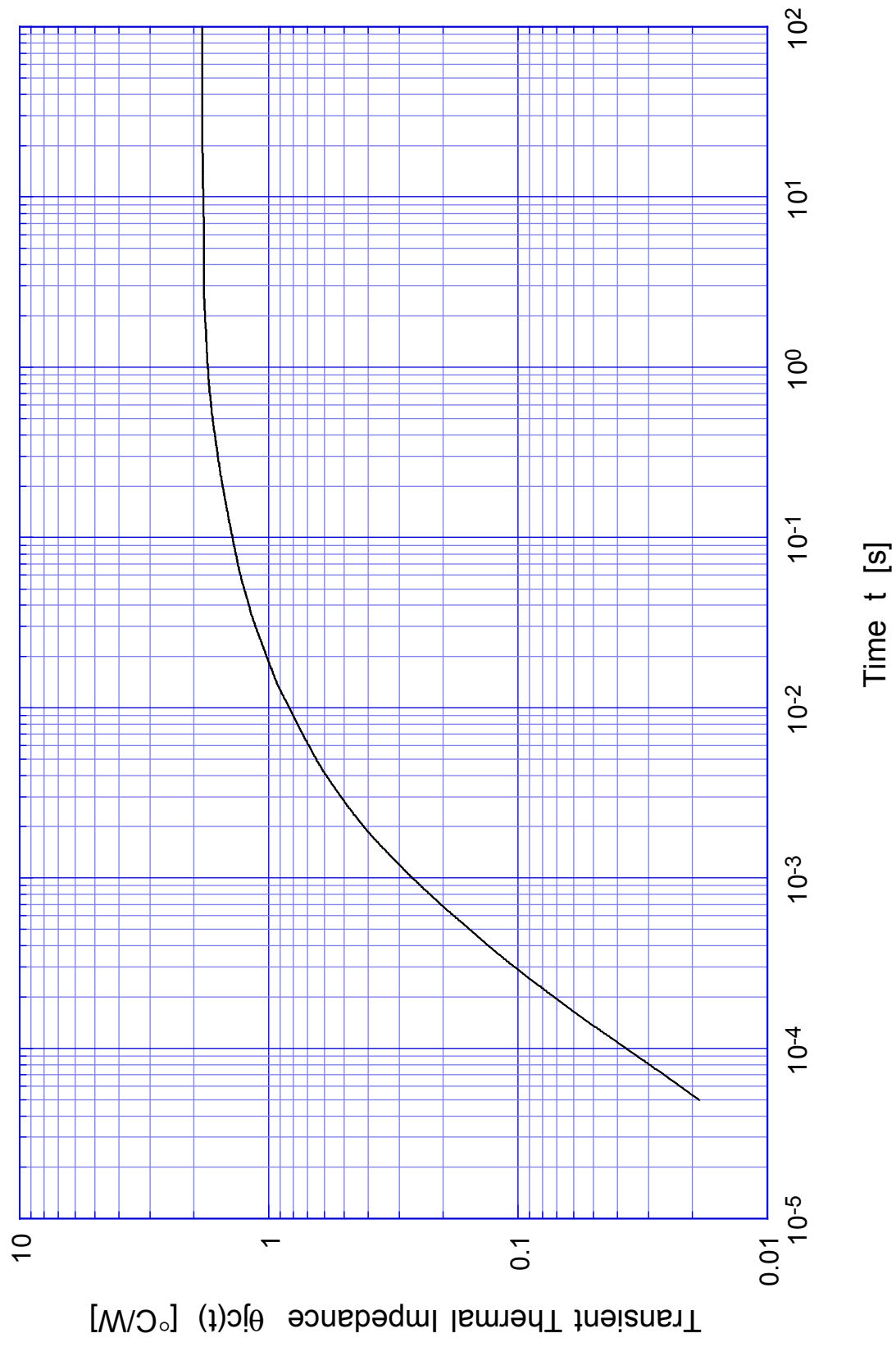


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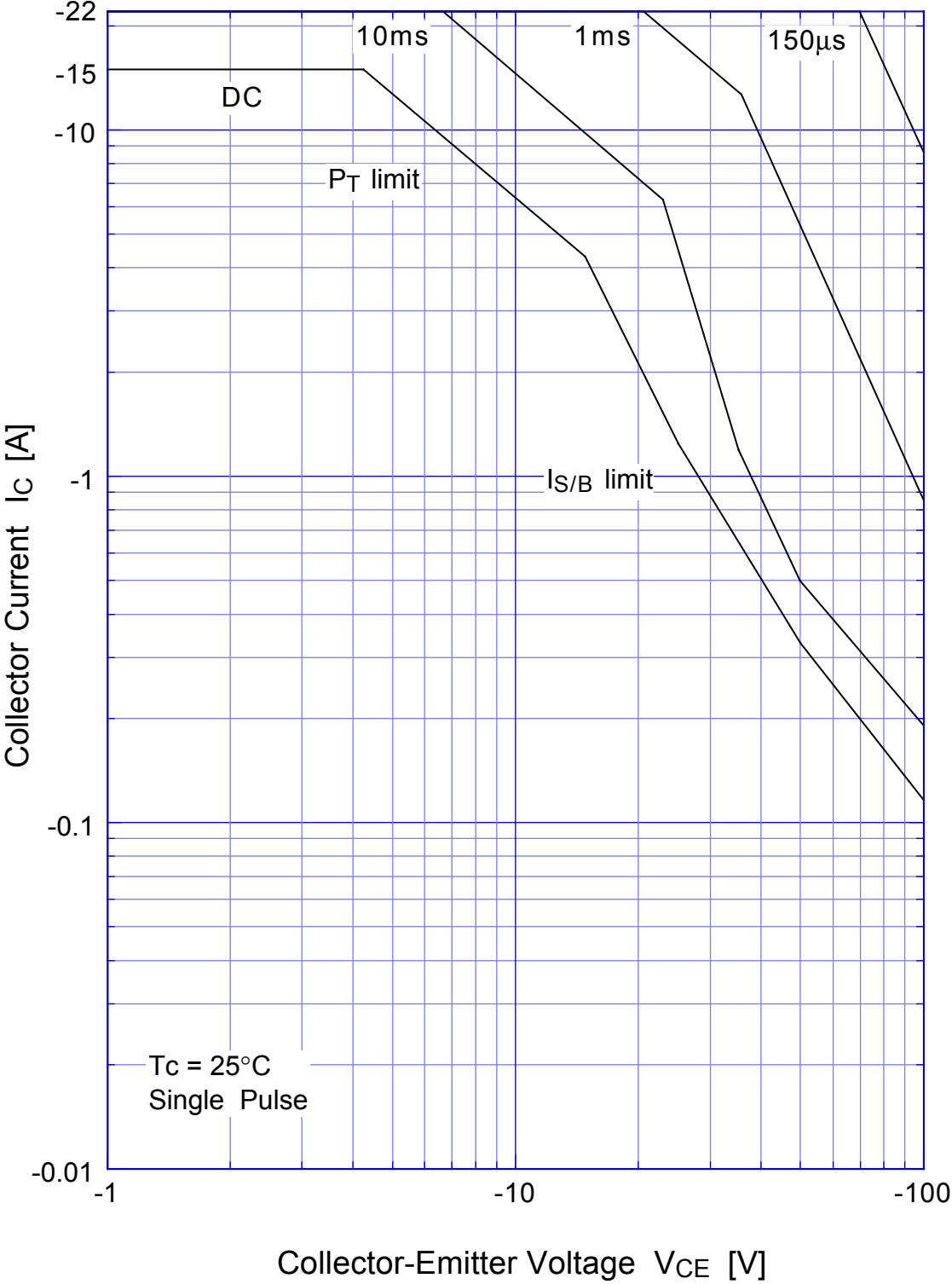
Switching Time - T_c



2SB1448 Transient Thermal Impedance

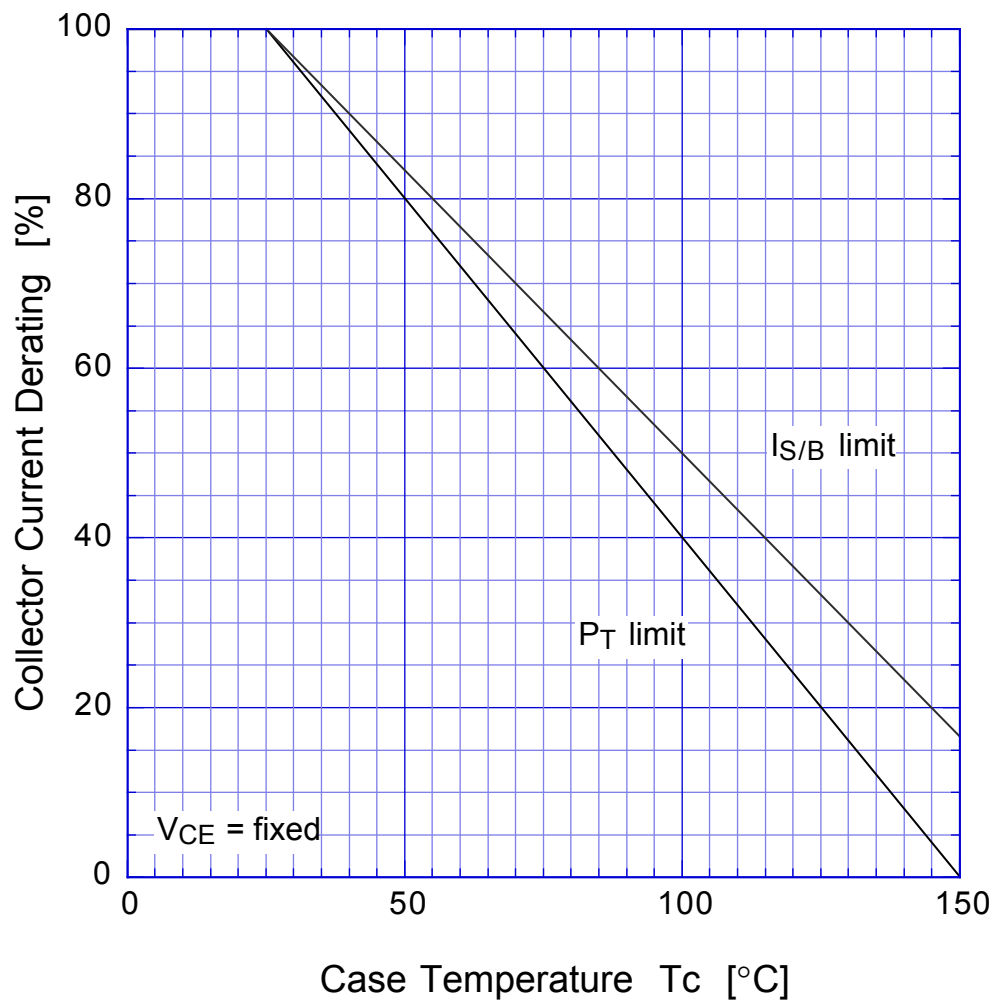


2SB1448 Forward Bias SOA



2SB1448

Collector Current Derating



2SB1448

Reverse Bias SOA

