

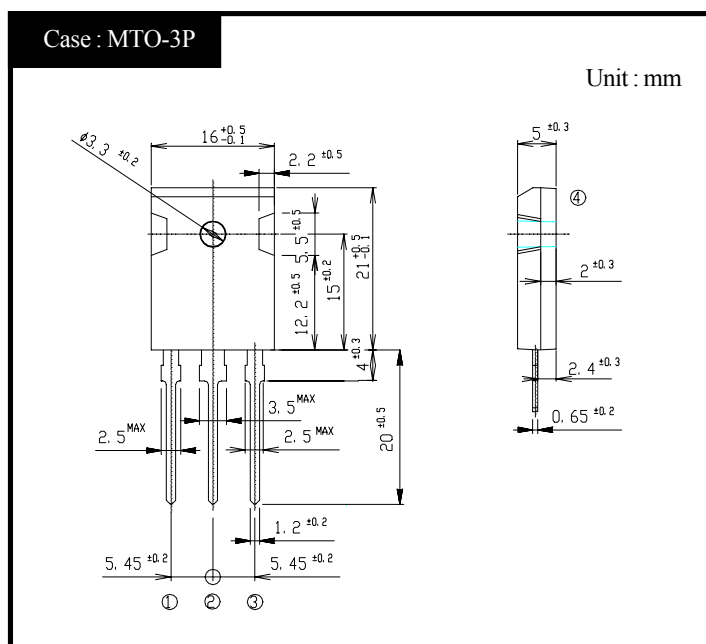
SHINDENGEN

Darlington Transistor

2SB1285
(T15J10)

-15A PNP

OUTLINE DIMENSIONS



RATINGS

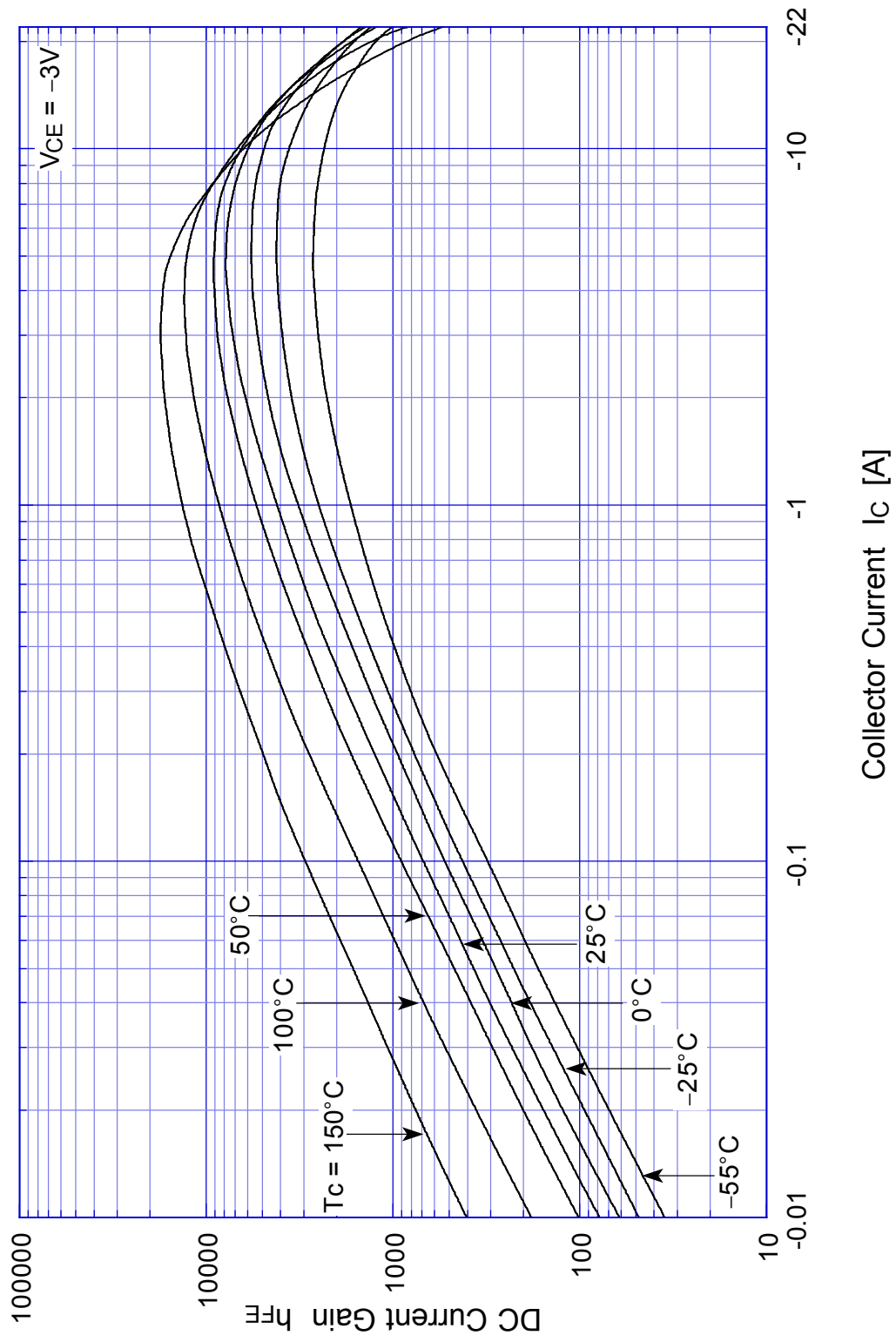
● Absolute Maximum Ratings

| Item | Symbol | Conditions | Ratings | Unit |
|------------------------------|------------------|-------------------------------|----------|------|
| Storage Temperature | T _{stg} | | -55~+150 | °C |
| Junction Temperature | T _j | | +150 | °C |
| Collector to Base Voltage | V _{CB0} | | -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 | 100 | W |
| Mounting Torque | TOR | (Recommended torque : 0.5N·m) | 0.8 | N·m |

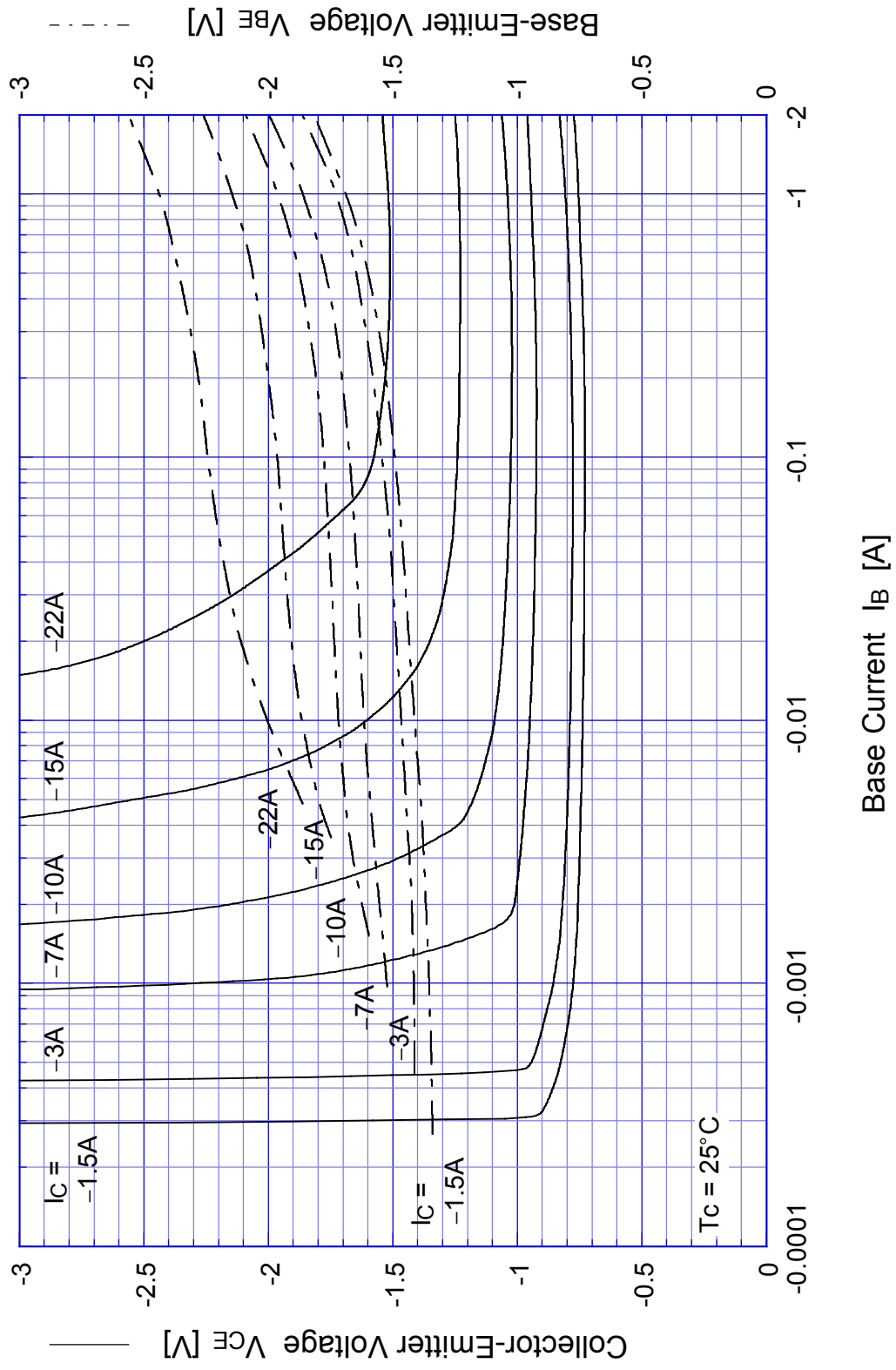
● Electrical Characteristics (T_c=25°C)

| 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 1.25 | °C/W |
| Transition Frequency | f _T | V _{CE} = 10V, I _C = -1.5A | TYP 20 | MHz |
| Turn on Time | ton | I _C = -15A I _{B1} = I _{B2} = -20mA R _L = 2 Ω | Max 1 | μs |
| Storage Time | ts | | Max 4 | |
| Fall Time | tf | | V _{BB2} = -4V | |

2SB1285 $h_{FE} - I_C$

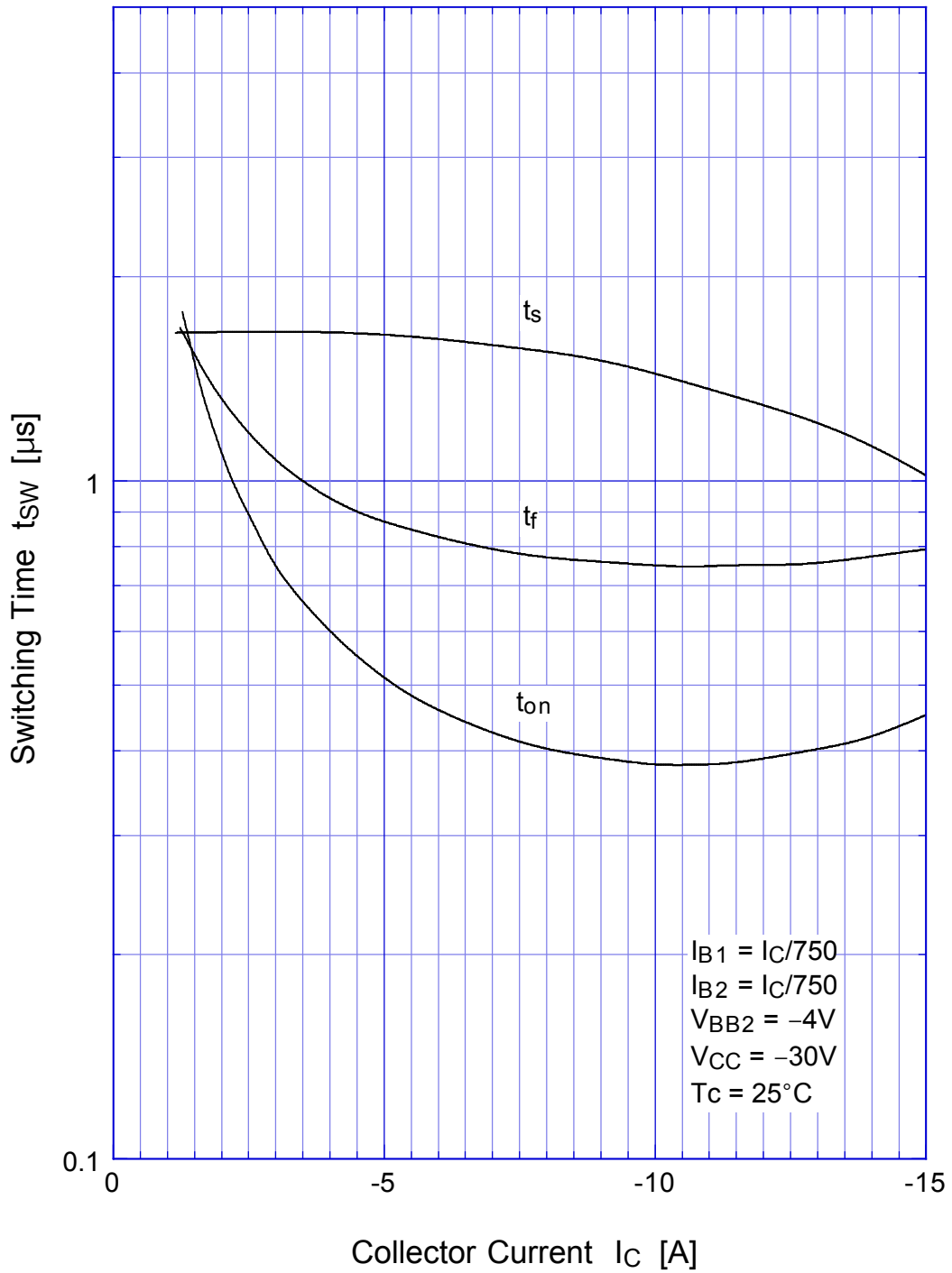


2SB1285 Saturation Voltage



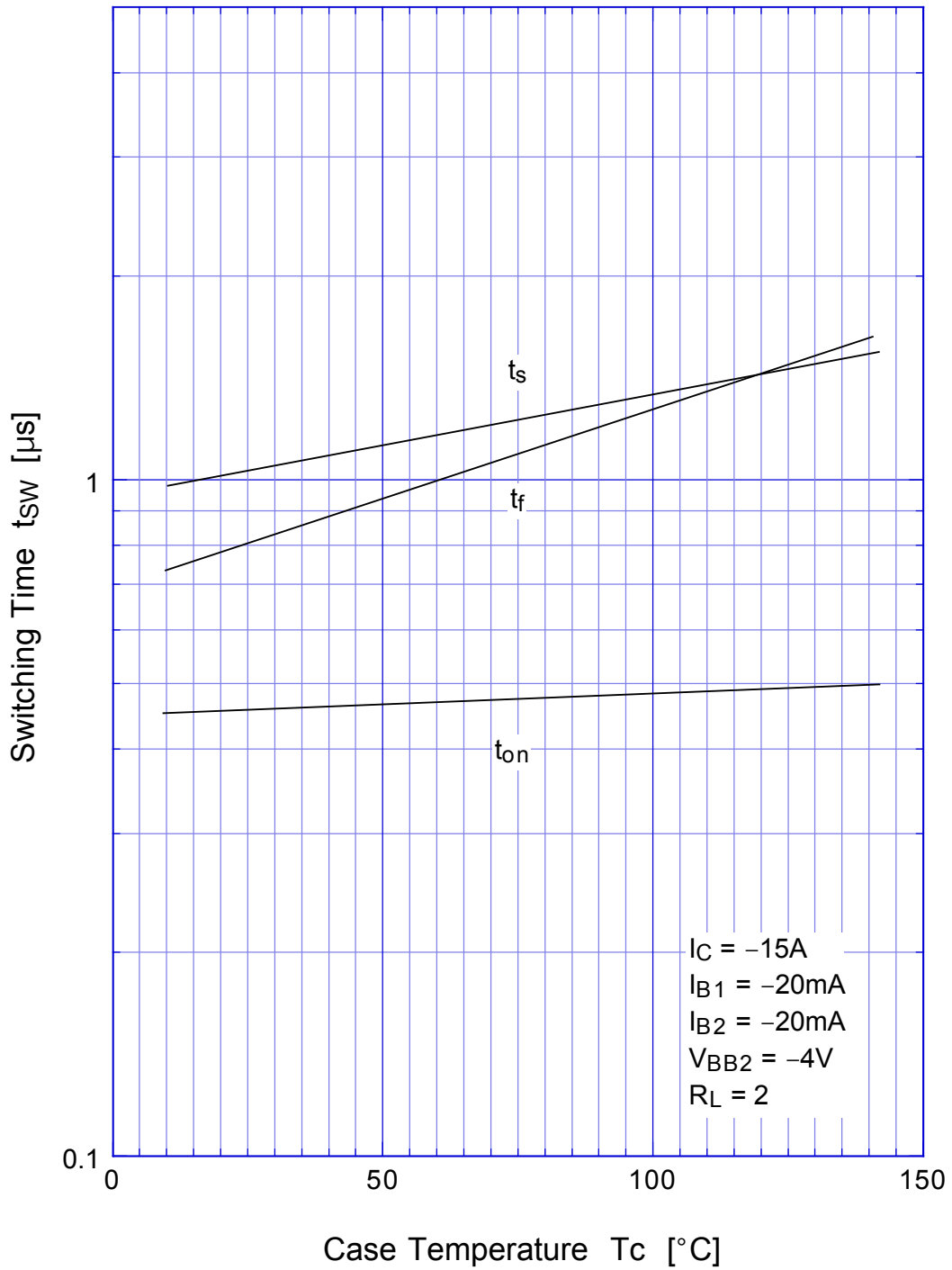
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Switching Time - I_C

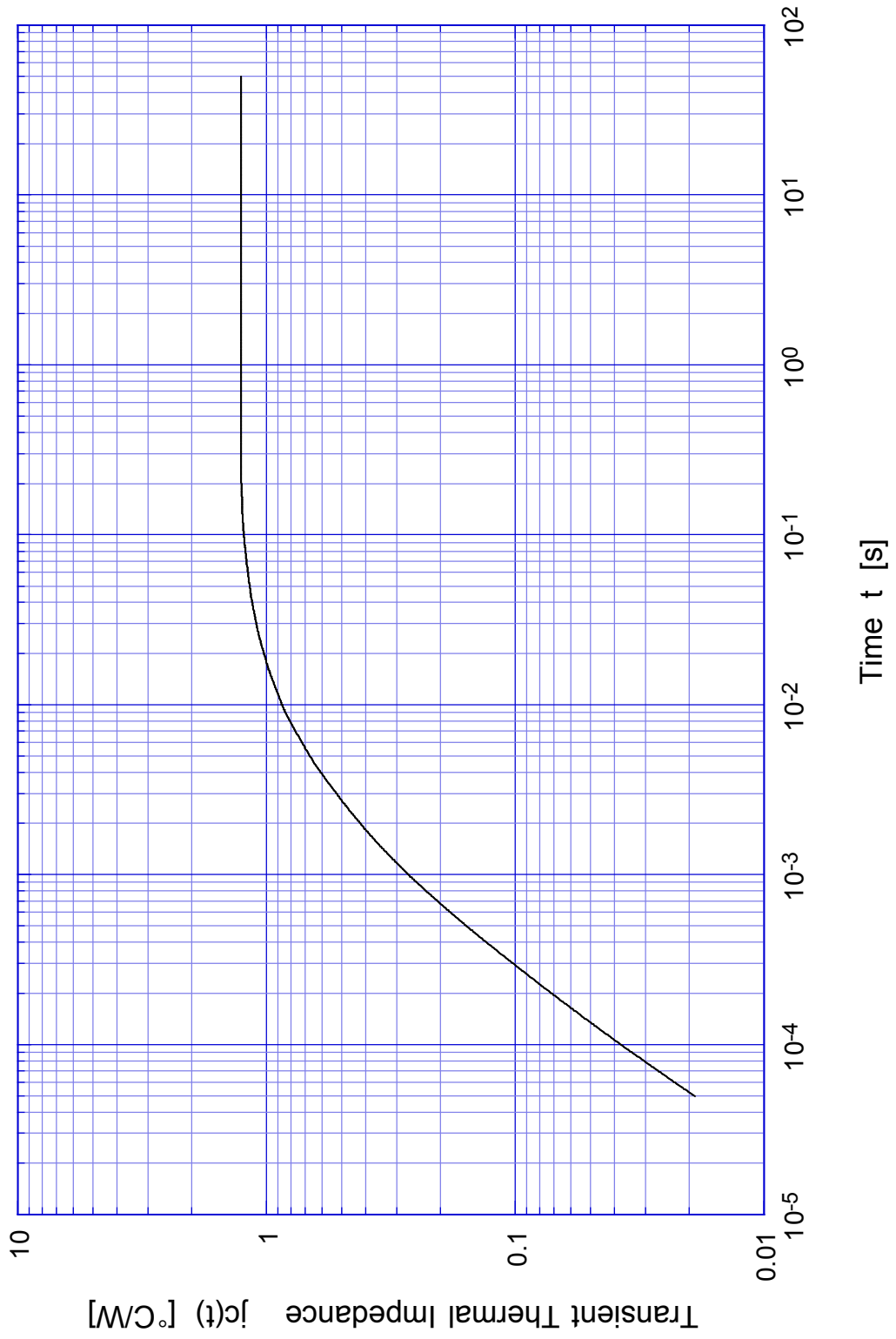


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Switching Time - Tc

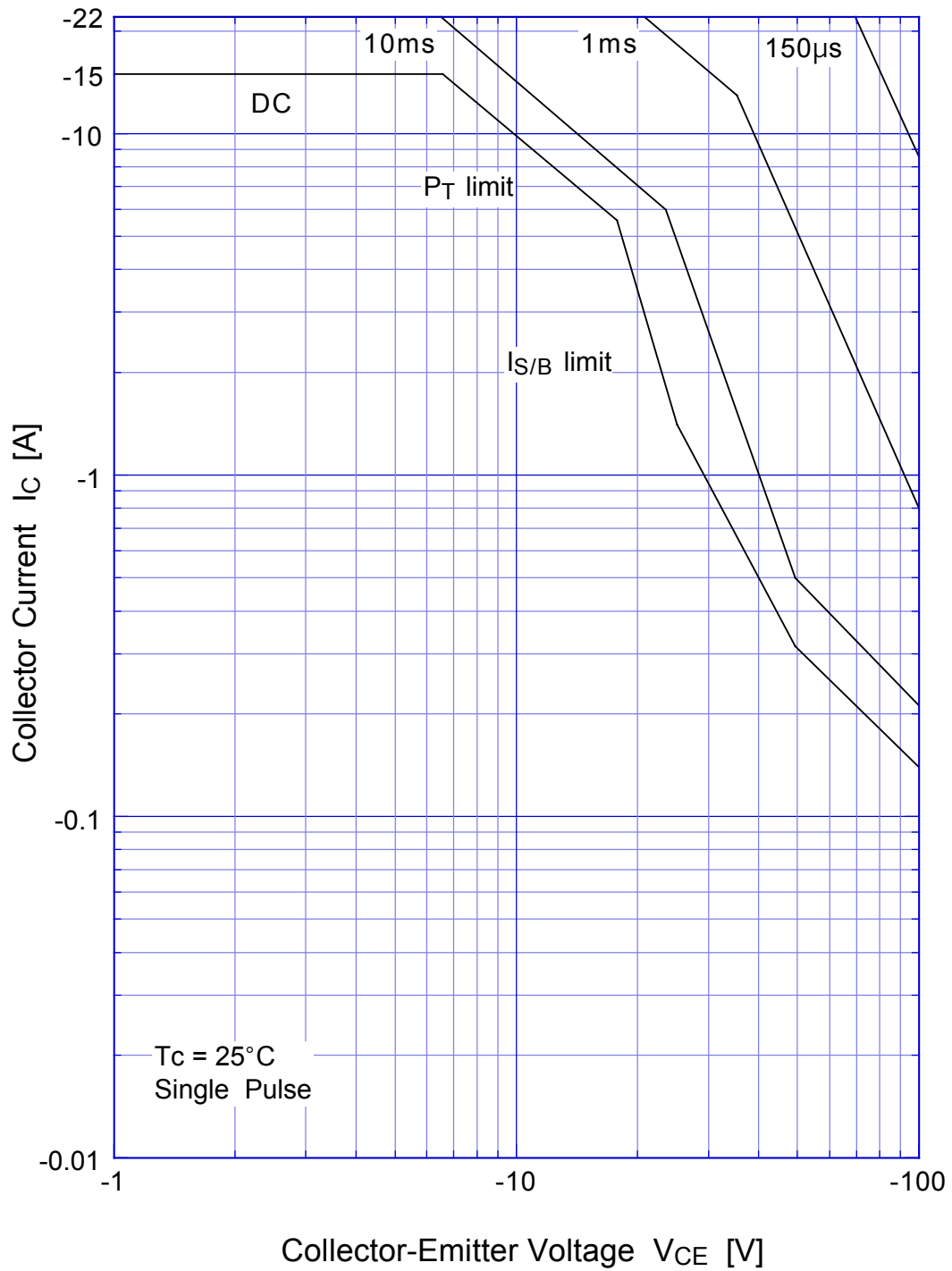


2SB1285 Transient Thermal Impedance

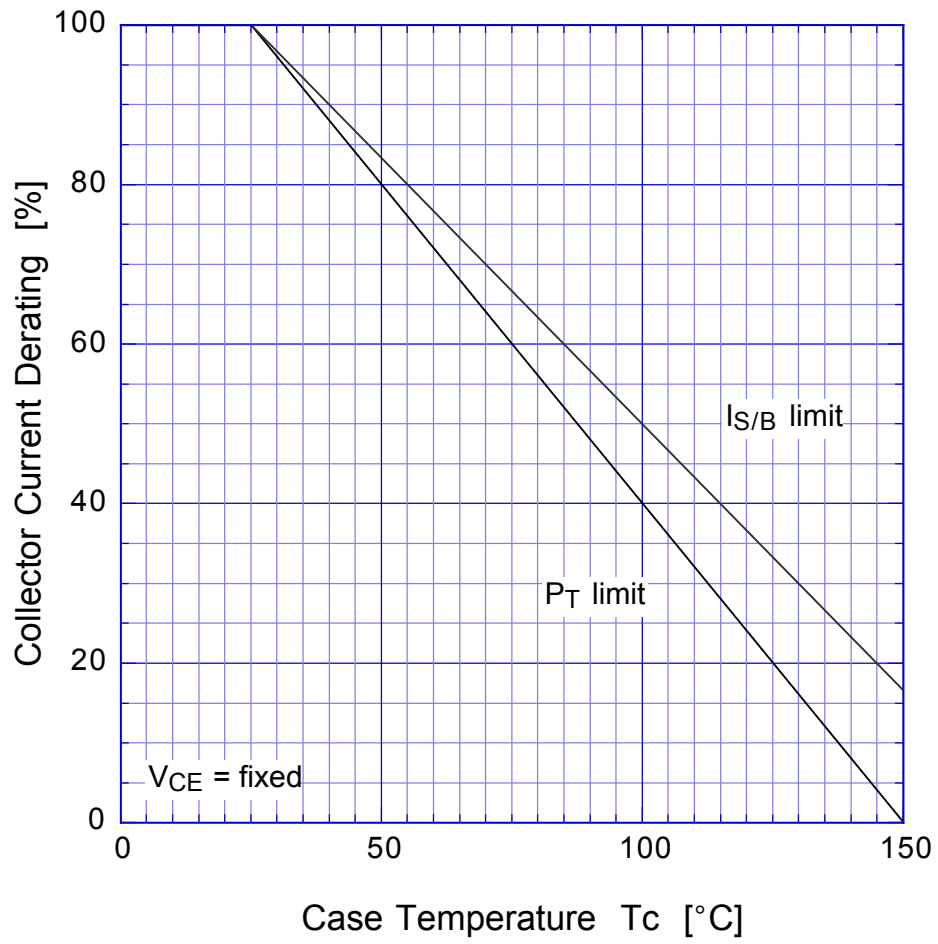


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Forward Bias SOA



2SB1285 Collector Current Derating



2SB1285

Reverse Bias SOA

