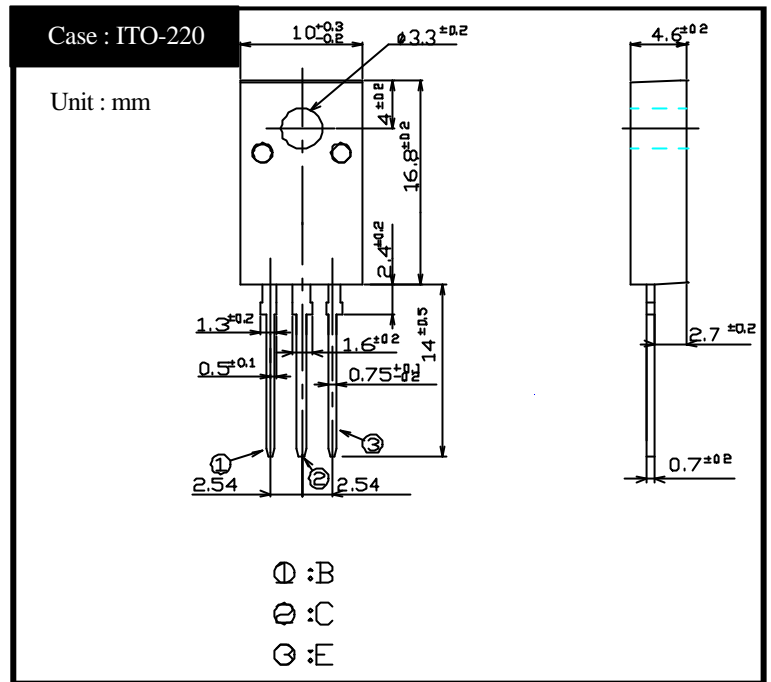


2SC4982
(TP10S8)

10A NPN

OUTLINE DIMENSIONS



RATINGS

Absolute Maximum Ratings

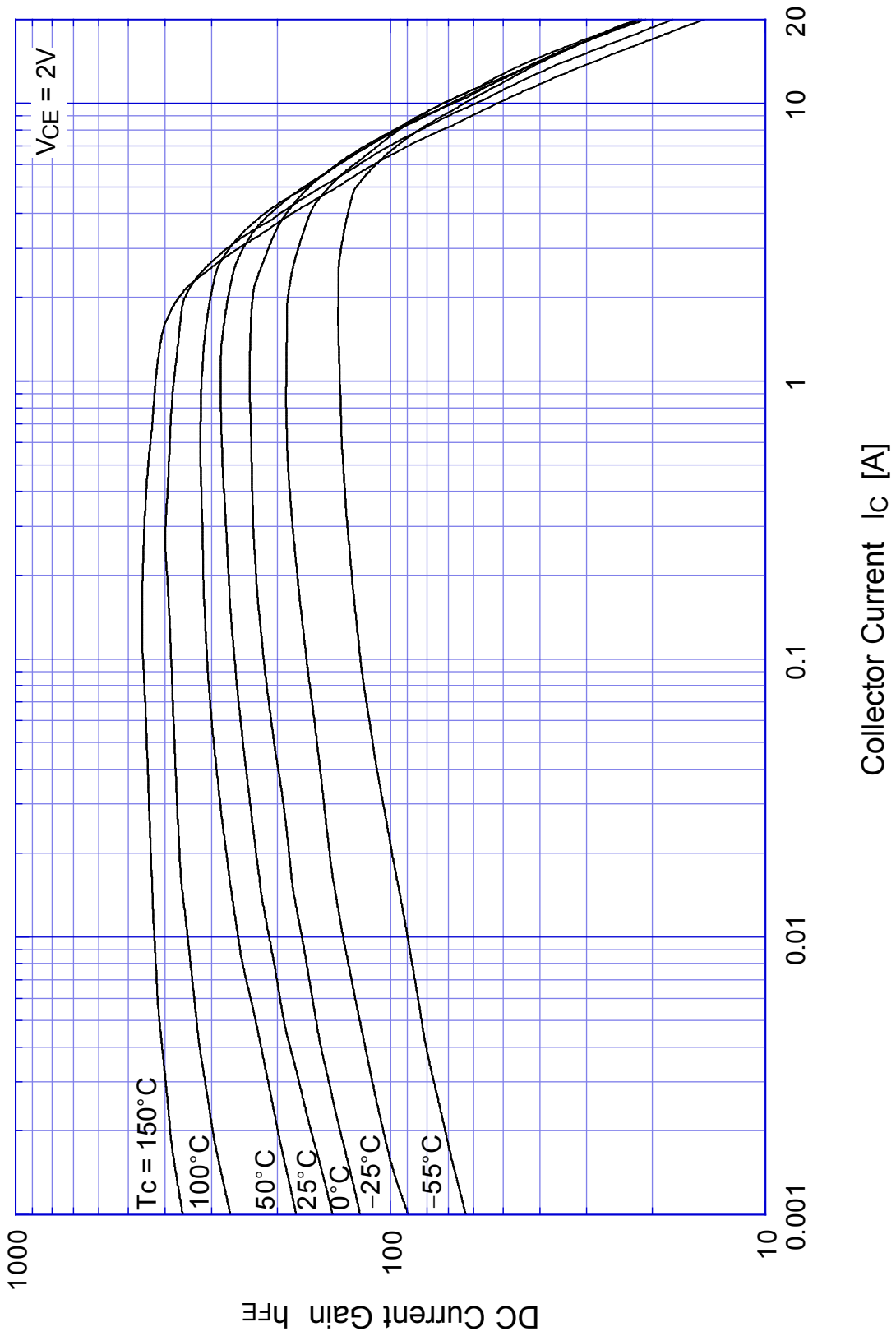
| Item | Symbol | Conditions | Ratings | Unit |
|------------------------------|------------------|-------------------------------|-----------|------|
| Storage Temperature | T _{stg} | | -55 ~ 150 | |
| Junction Temperature | T _j | | 150 | |
| Collector to Base Voltage | V _{CB0} | | 100 | V |
| Collector to Emitter Voltage | V _{CEO} | | 80 | 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 | T _C = 25 | 25 | W |
| Dielectric Strength | V _{dis} | Terminal to case, AC 1 minute | 2 | kV |
| Mounting Torque | TOR | (Recommended torque : 0.3N·m) | 0.5 | N·m |

Electrical Characteristics (T_c=25)

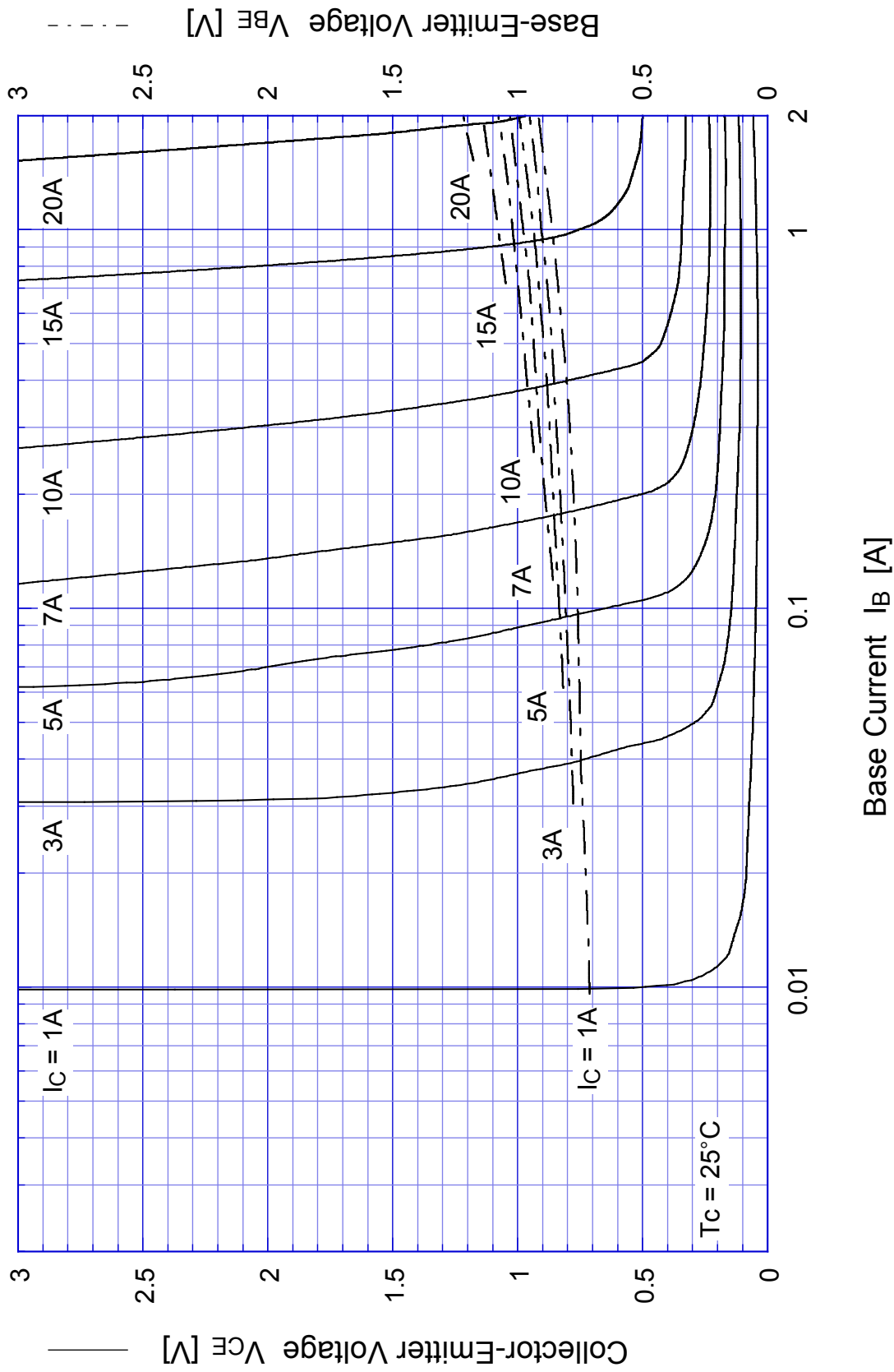
| Item | Symbol | Conditions | Ratings | Unit |
|---|-----------------------|--|---------|------|
| Collector to Emitter Sustaining Voltage | V _{CEO(sus)} | I _C = 0.1A | Min 80 | V |
| Collector Cutoff Current | I _{CB0} | At rated Voltage | Max 0.1 | mA |
| | I _{CEO} | | Max 0.1 | |
| Emitter Cutoff 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 | t _{on} | I _C = 5A I _{B1} = 0.5A, I _{B2} = 0.5A R _L = 5 Ω, V _{BB2} = 4V | Max 0.3 | μs |
| Storage Time | t _s | | Max 1.5 | |
| Fall Time | t _f | | Max 0.2 | |

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$h_{FE} - I_C$

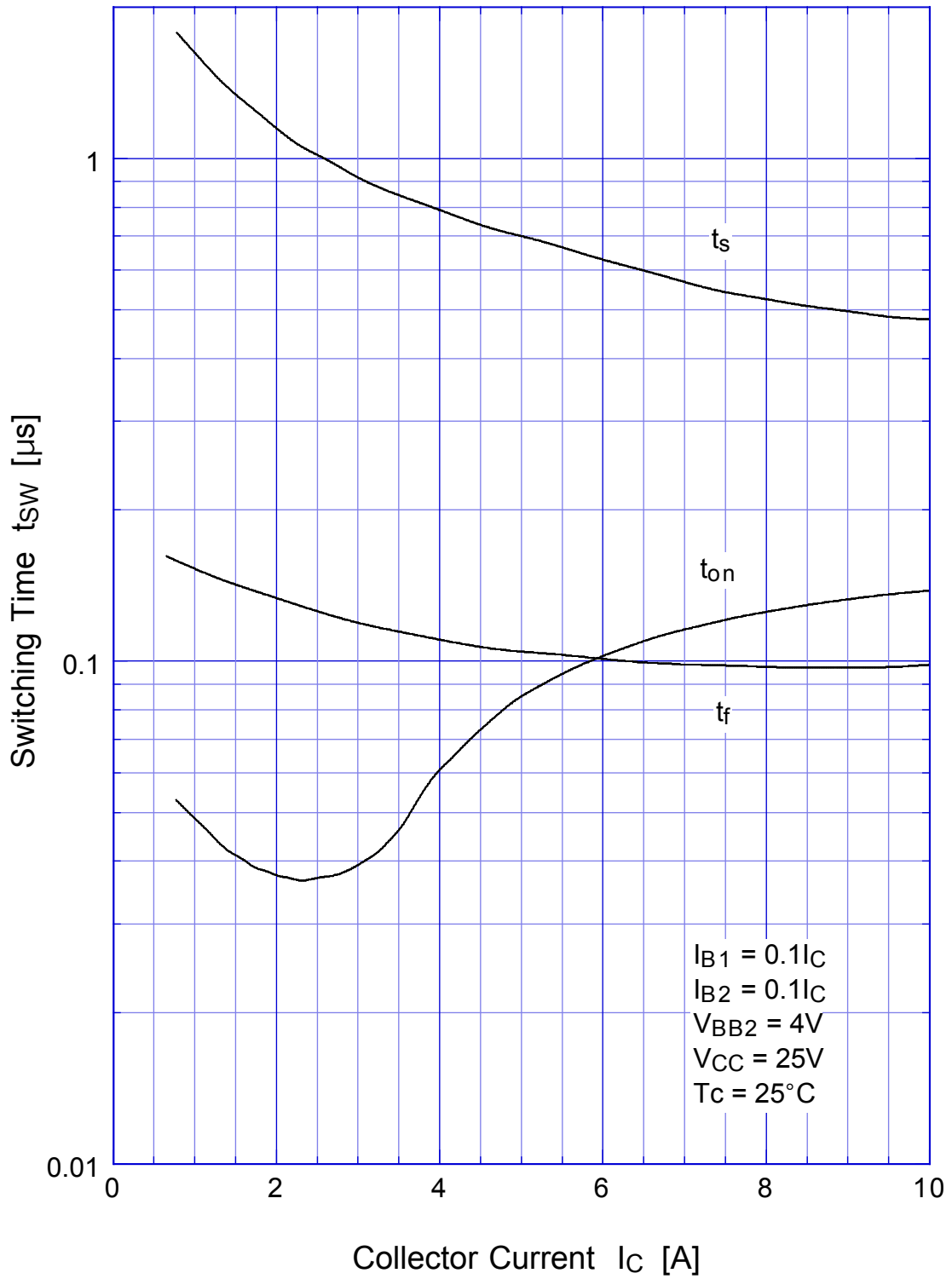


2SC4982 Saturation Voltage



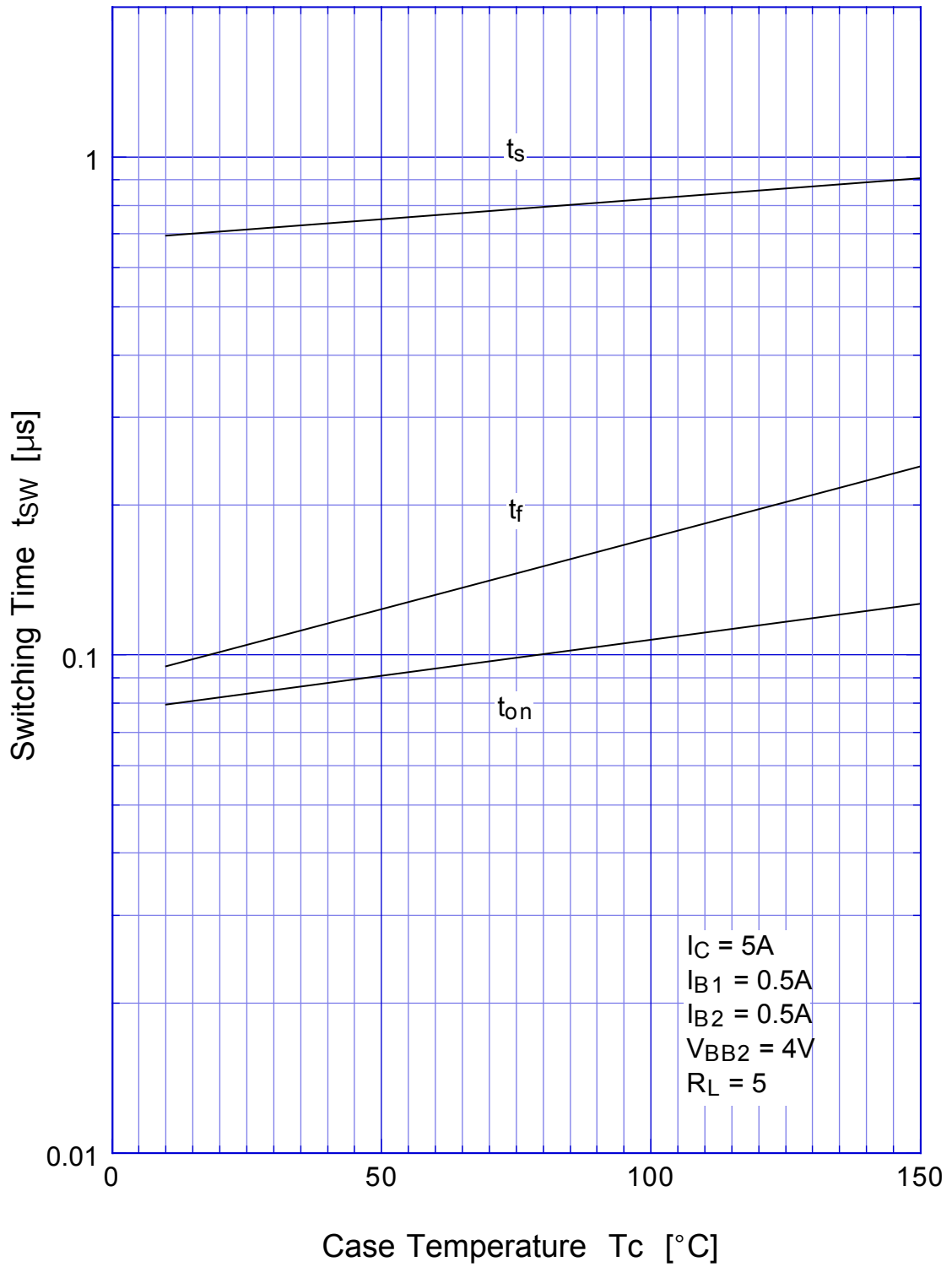
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Switching Time - I_C

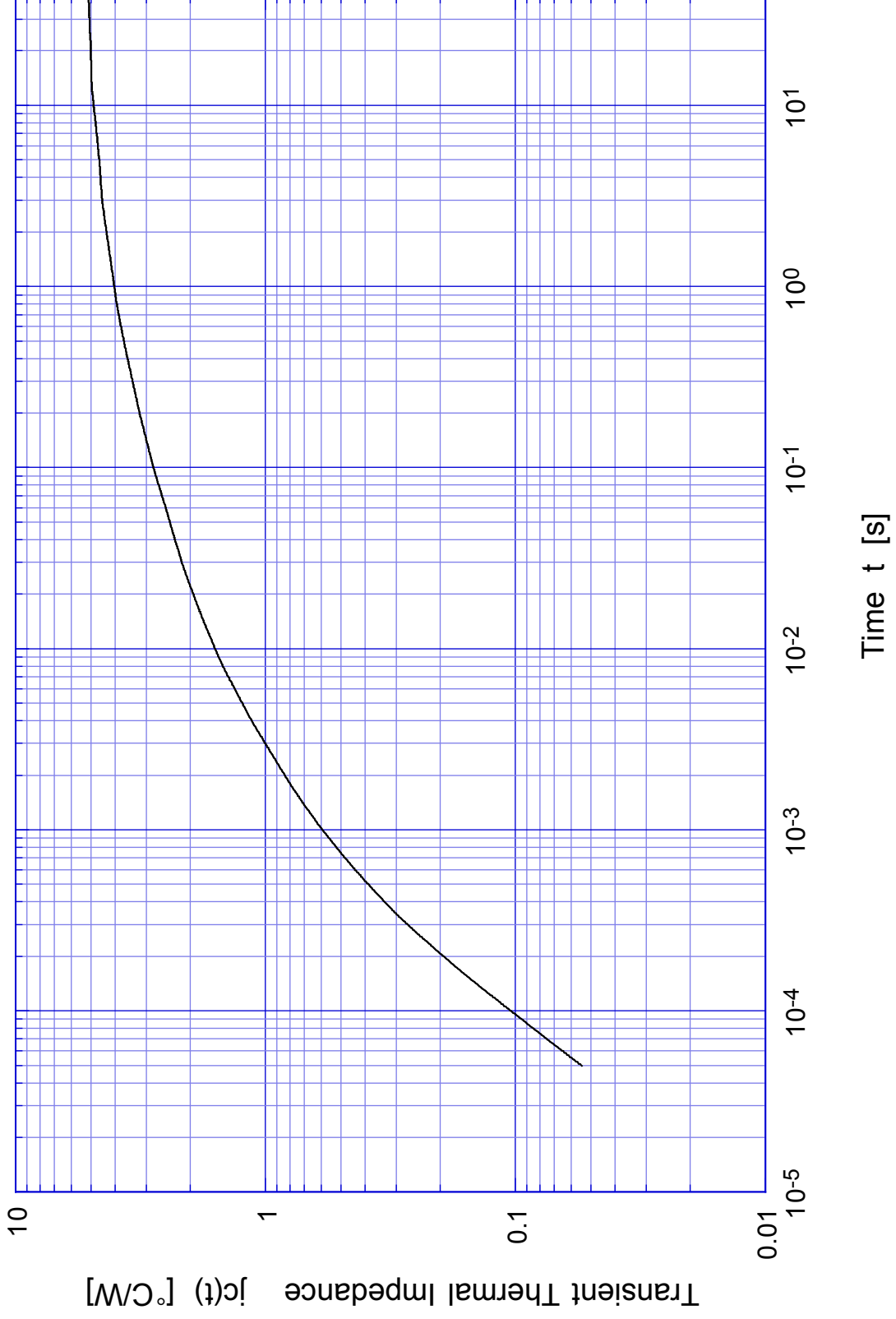


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Switching Time - Tc

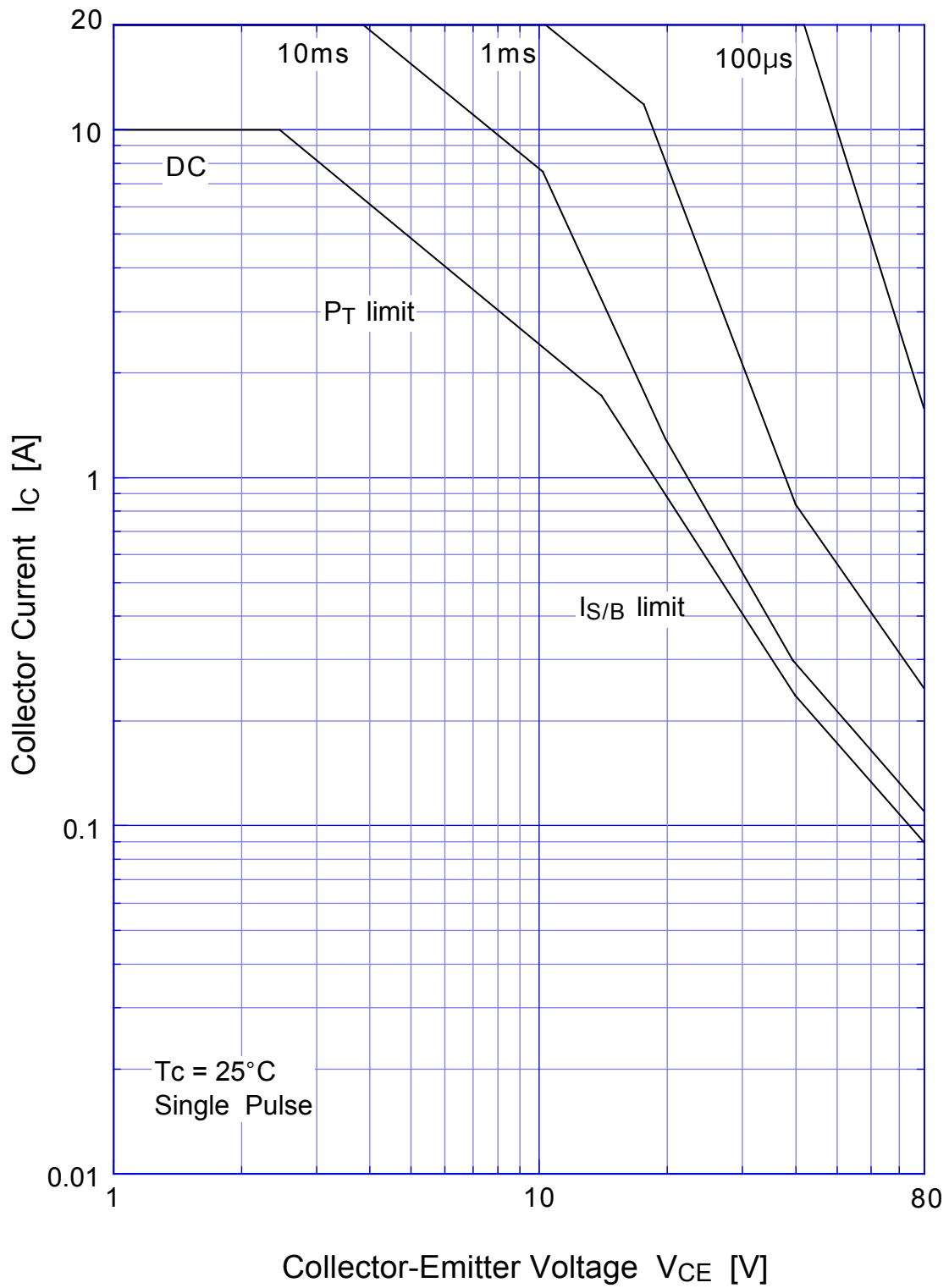


2SC4982 Transient Thermal Impedance



2SC4982

Forward Bias SOA



2SC4982 Collector Current Derating

