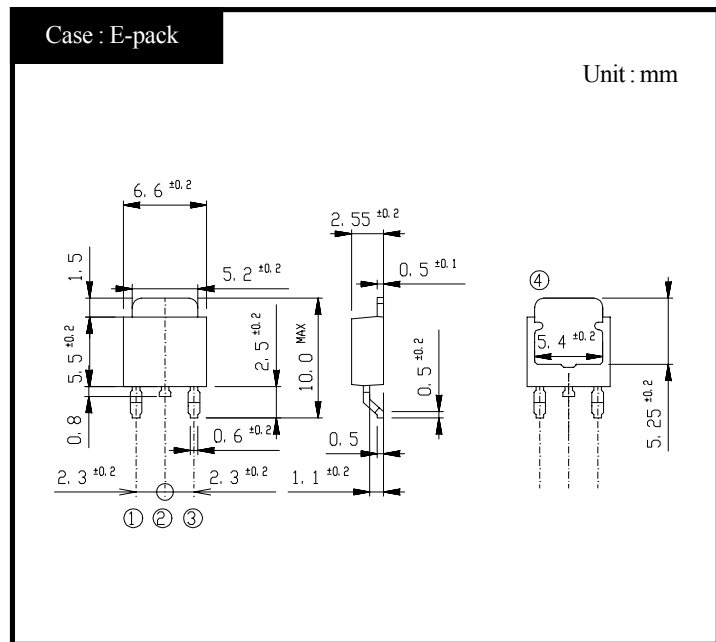


2SC4979 (TE5S8)

5A NPN

OUTLINE DIMENSIONS



RATINGS

● Absolute Maximum Ratings

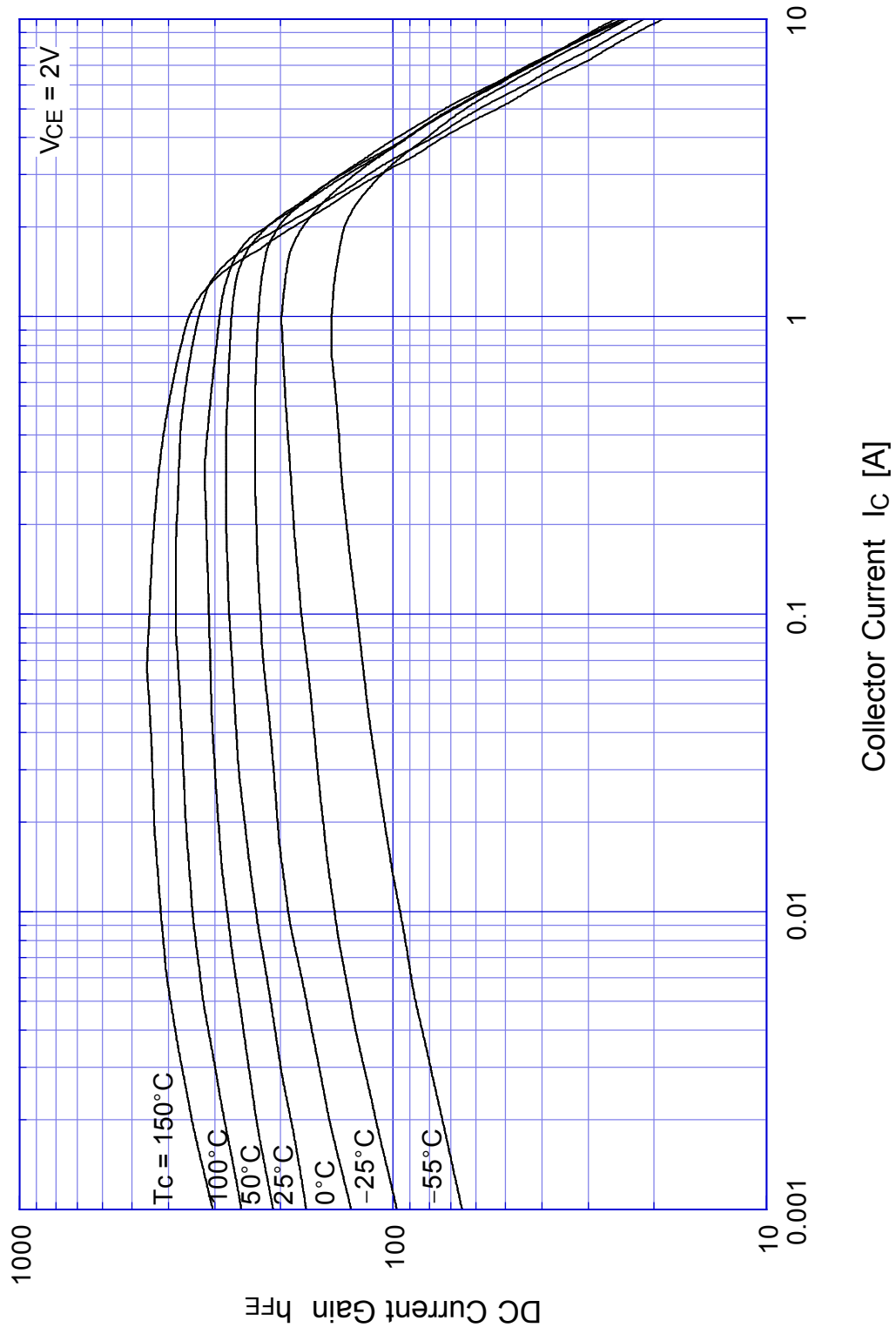
| Item | Symbol | Conditions | Ratings | Unit |
|------------------------------|------------------|-----------------------|---------|------|
| Storage Temperature | T _{stg} | | -55~150 | °C |
| Junction Temperature | T _j | | 150 | °C |
| Collector to Base Voltage | V _{CB0} | | 100 | V |
| Collector to Emitter Voltage | V _{CEO} | | 80 | V |
| Emitter to Base Voltage | V _{EBO} | | 7 | V |
| Collector Current DC | I _C | | 5 | A |
| Collector Current Peak | I _{CP} | | 10 | A |
| Base Current DC | I _B | | 1.5 | A |
| Base Current Peak | I _{BP} | | 2 | A |
| Total Transistor Dissipation | P _T | T _c = 25°C | 10 | W |

● Electrical Characteristics (T_c=25°C)

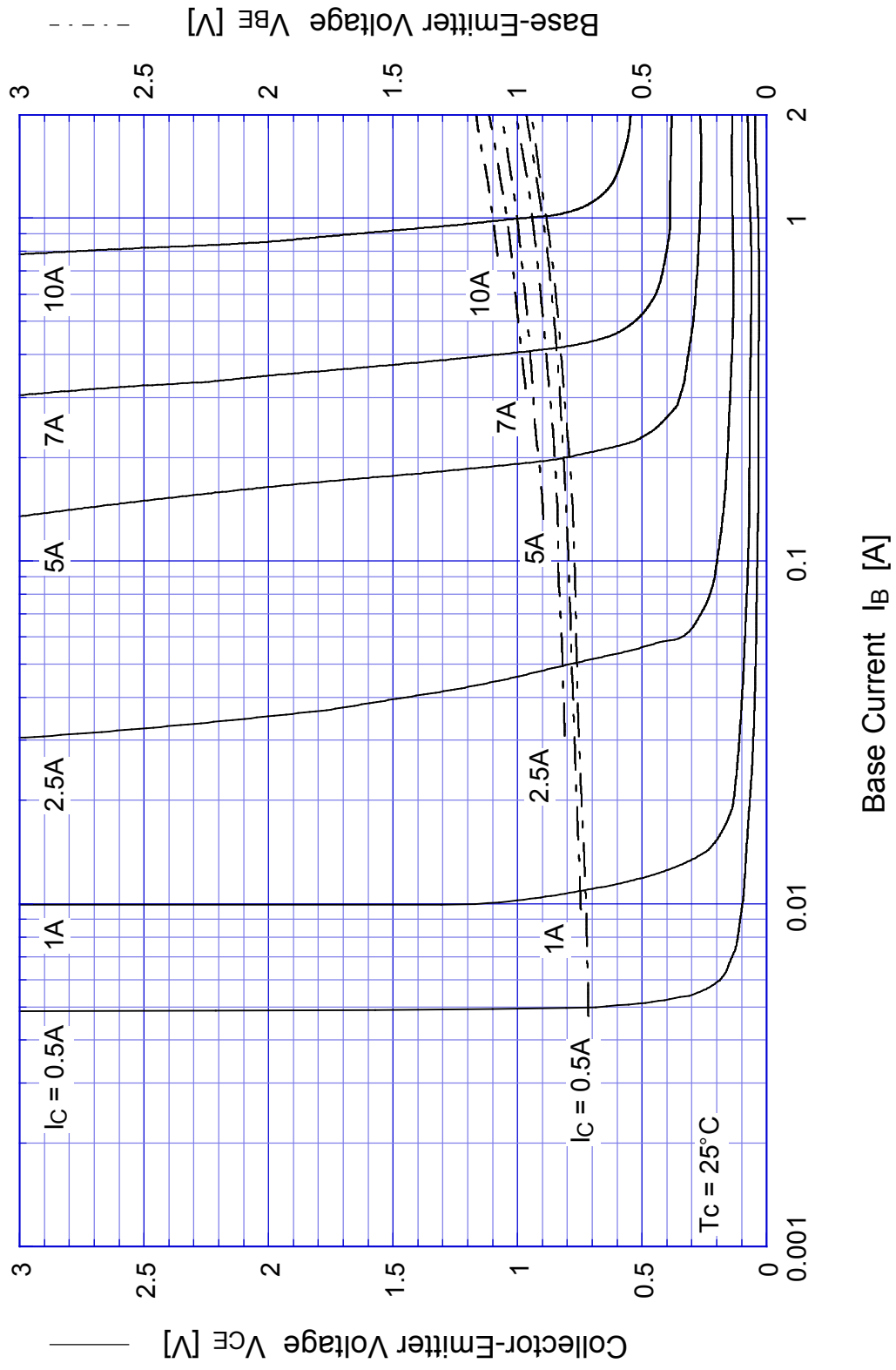
| Item | Symbol | Conditions | Ratings | Unit |
|---|-----------------------|---|----------|------|
| Collector to Emitter Sustaining Voltage | V _{CEO(sus)} | I _C = 0.05A | Min 80 | V |
| Collector Cutoff Current | I _{CBO} | At rated Voltage | Max 0.1 | mA |
| | I _{CEO} | | Max 0.1 | |
| Emitter Cutoff Current | I _{EBO} | At rated Voltage | Max 0.1 | mA |
| DC Current Gain | h _{FE} | V _{CE} = 2V, I _C = 2.5A | Min 70 | |
| Collector to Emitter Saturation Voltage | V _{CE(sat)} | I _C = 2.5A | Max 0.3 | V |
| Base to Emitter Saturation Voltage | V _{BE(sat)} | I _B = 0.13A | Max 1.2 | V |
| Thermal Resistance | θ _{jc} | Junction to case | Max 12.5 | °C/W |
| Transition Frequency | f _T | V _{CE} = 10V, I _C = 0.5A | TYP 50 | MHz |
| Turn on Time | ton | I _C = 2.5A I _{B1} = 0.25A, I _{B2} = 0.25A R _L = 12 Ω, V _{BB2} = 4V | Max 0.3 | μs |
| Storage Time | ts | | Max 1.5 | |
| Fall Time | tf | | Max 0.2 | |

2SC4979

$h_{FE} - I_C$

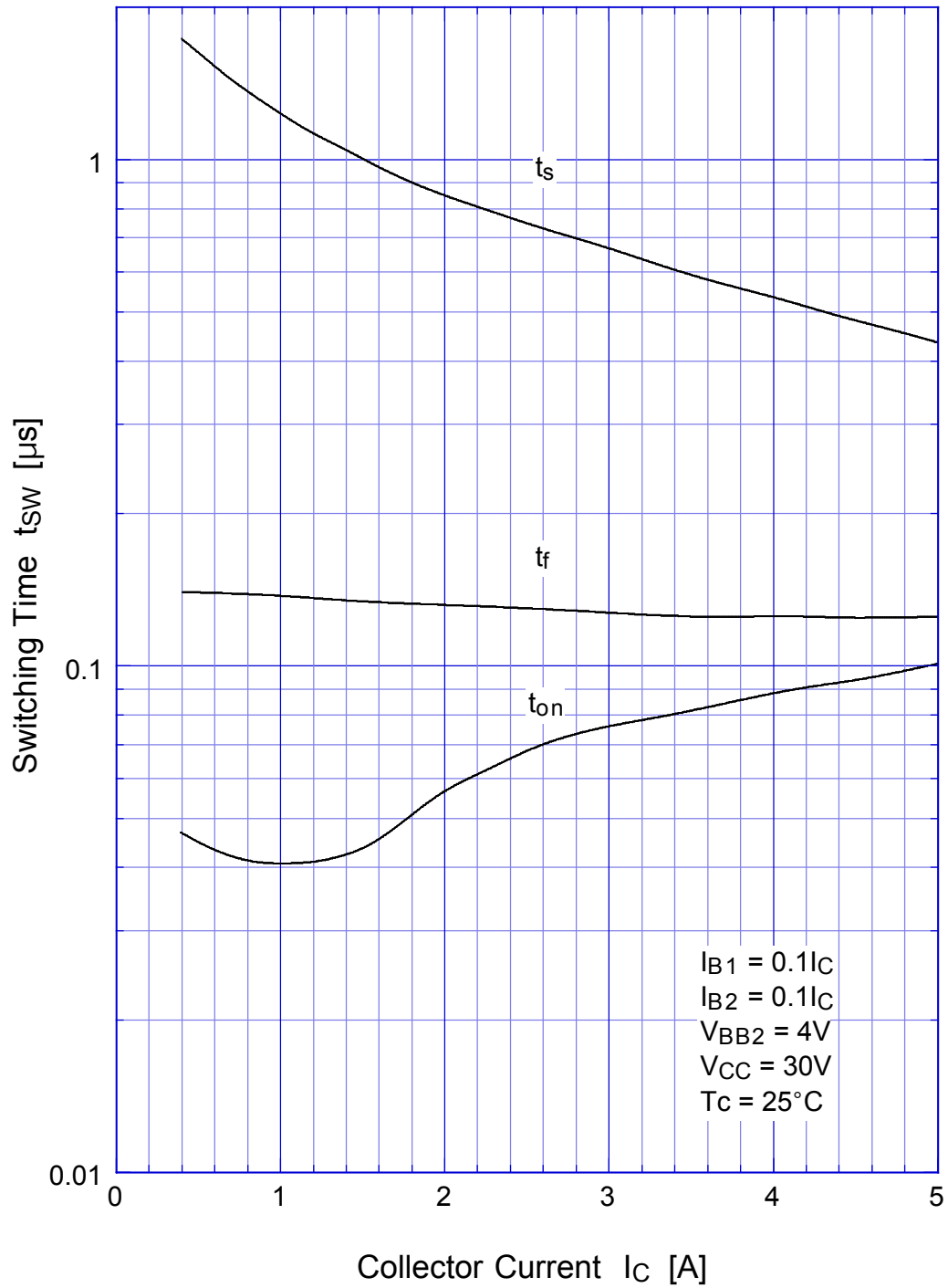


2SC4979 Saturation Voltage



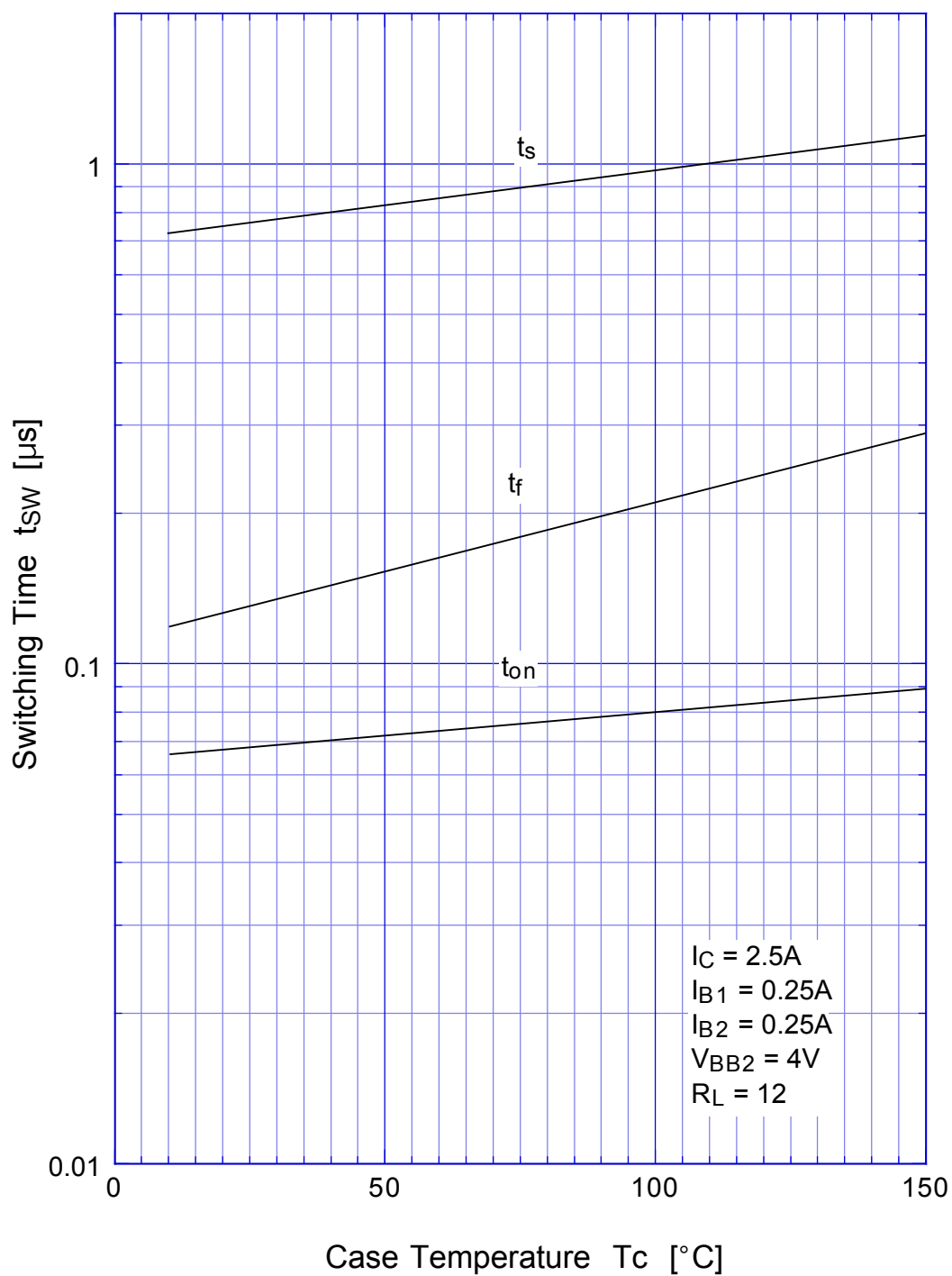
2SC4979

Switching Time - I_C

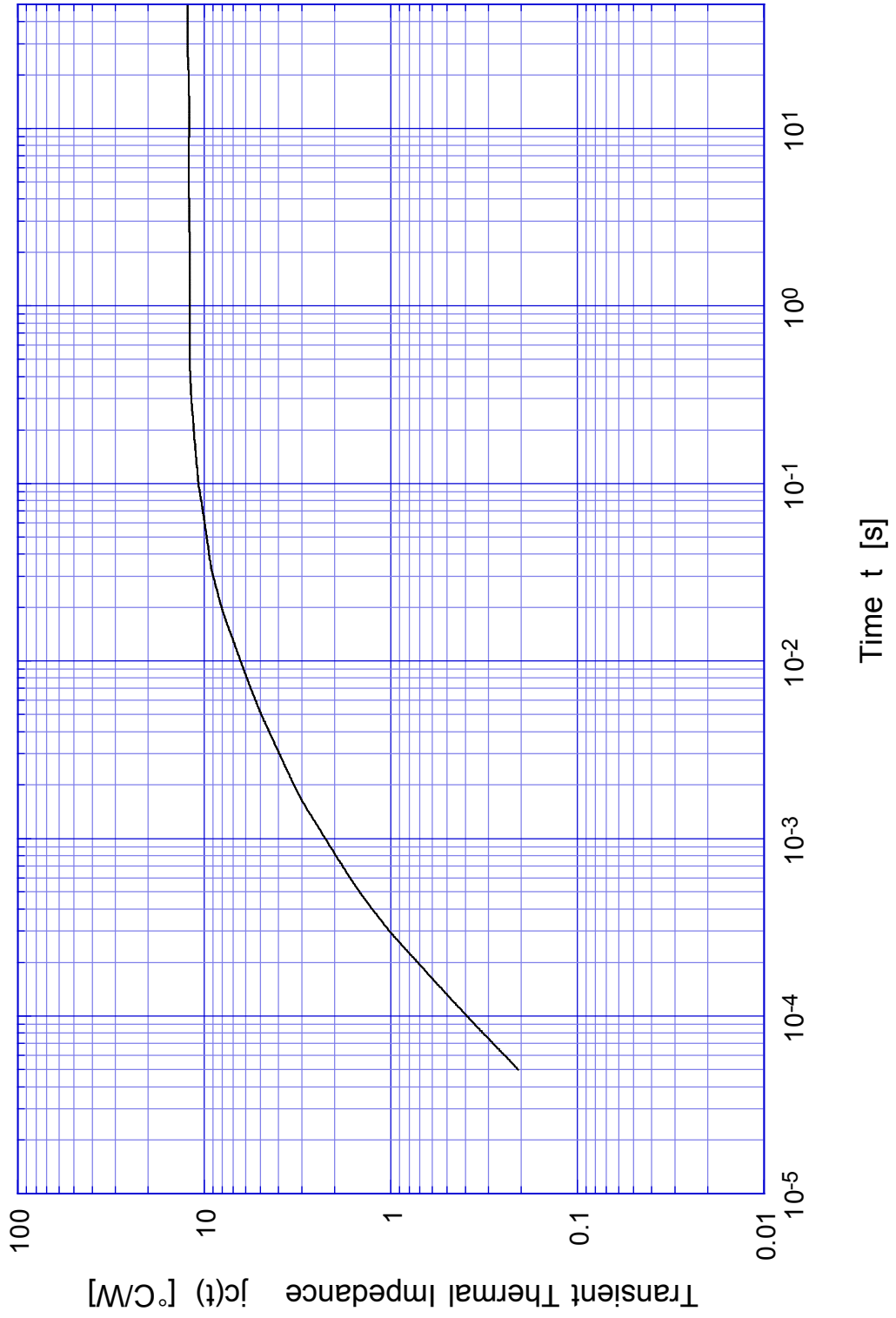


2SC4979

Switching Time - Tc

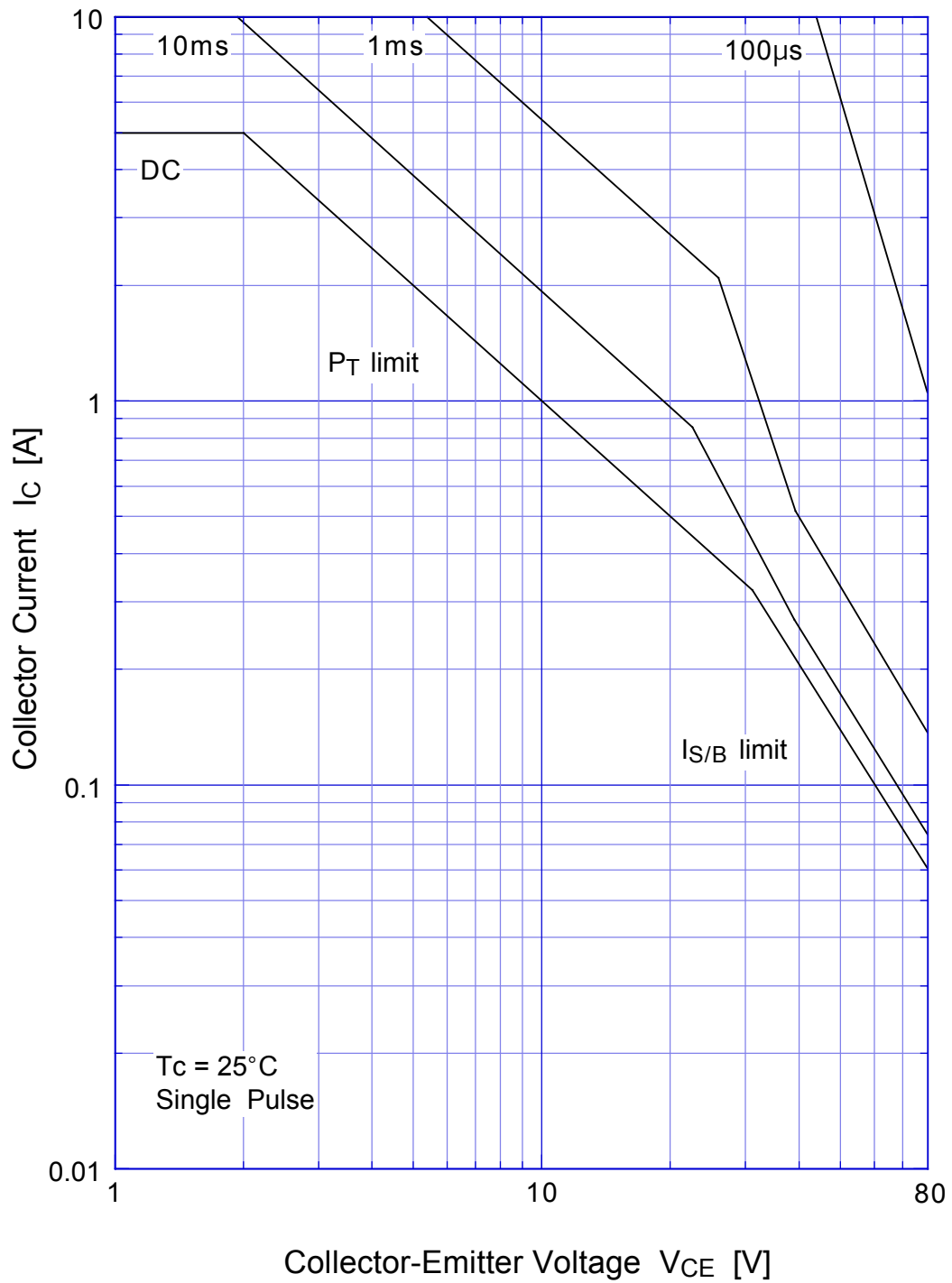


2SC4979 Transient Thermal Impedance



2SC4979

Forward Bias SOA



$T_c = 25^\circ\text{C}$
Single Pulse

2SC4979 Collector Current Derating

