

Absolute maximum ratings

($T_a=25^\circ\text{C}$)

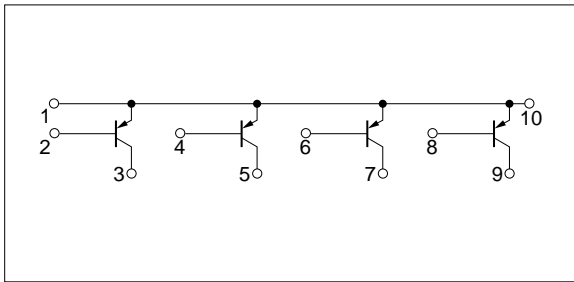
| Symbol | Ratings | Unit |
|-----------|------------------------------------|------------------|
| V_{CB0} | -60 | V |
| V_{CEO} | -60 | V |
| V_{EBO} | -6 | V |
| I_c | -3 | A |
| I_{CP} | -6 (PW \leq 10ms, Du \leq 50%) | A |
| P_T | 4 ($T_a=25^\circ\text{C}$) | W |
| | 20 ($T_c=25^\circ\text{C}$) | |
| T_j | 150 | $^\circ\text{C}$ |
| T_{stg} | -40 to +150 | $^\circ\text{C}$ |

Electrical characteristics

($T_a=25^\circ\text{C}$)

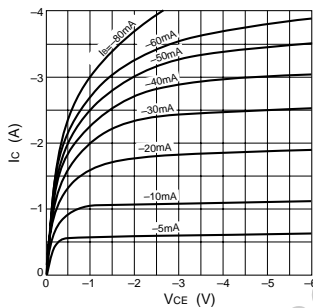
| Symbol | Specification | | | Unit | Conditions |
|---------------|---------------|------|------|---------------|--|
| | min | typ | max | | |
| I_{CB0} | | | -100 | μA | $V_{CB}=-60\text{V}$ |
| I_{EBO} | | | -100 | μA | $V_{EB}=-6\text{V}$ |
| V_{CEO} | -60 | | | V | $I_c=-25\text{mA}$ |
| h_{FE} | 40 | | | | $V_{CE}=-4\text{V}$, $I_c=-1\text{A}$ |
| $V_{CE(sat)}$ | | | -1.0 | V | $I_c=-2\text{A}$, $I_B=-0.2\text{A}$ |
| t_{on} | | 0.25 | | μs | $V_{CC}=-12\text{V}$, $I_c=-2\text{A}$, |
| t_{stg} | | 0.75 | | μs | $I_B1=-I_B2=-0.2\text{A}$ |
| t_f | | 0.25 | | μs | |

Equivalent circuit diagram

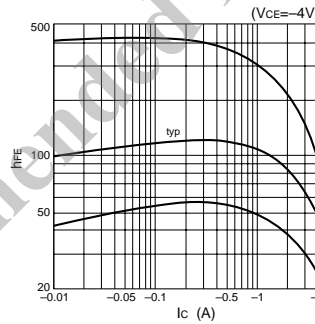


Characteristic curves

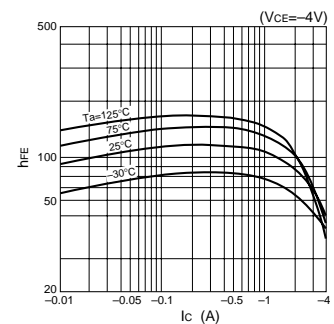
I_c - V_{CE} Characteristics (Typical)



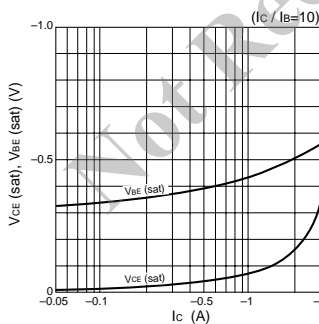
h_{FE} - I_c Characteristics (Typical)



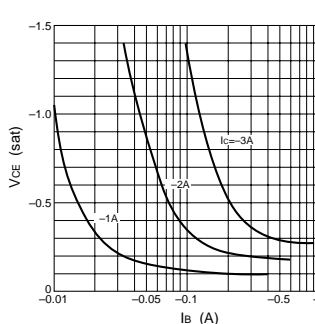
h_{FE} - I_c Temperature Characteristics (Typical)



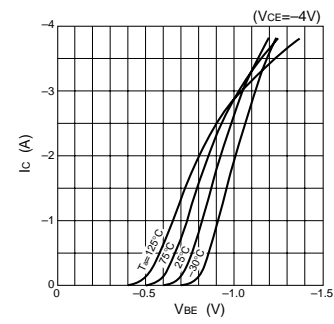
$V_{CE(sat)}$, $V_{BE(sat)}$ - I_c Characteristics (Typical)



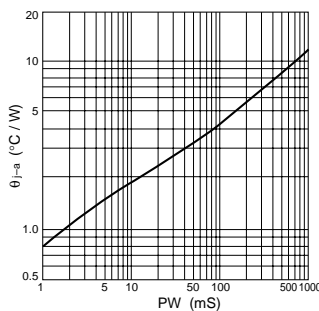
$V_{CE(sat)}$ - I_B Characteristics (Typical)



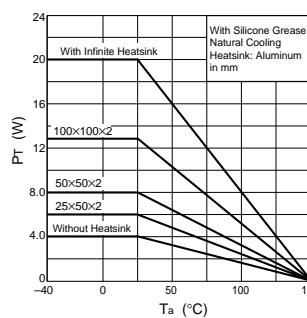
I_c - V_{BE} Temperature Characteristics (Typical)



θ_{j-a} -PW Characteristics



P_T - T_a Characteristics



Safe Operating Area (SOA)

