

Absolute maximum ratings

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

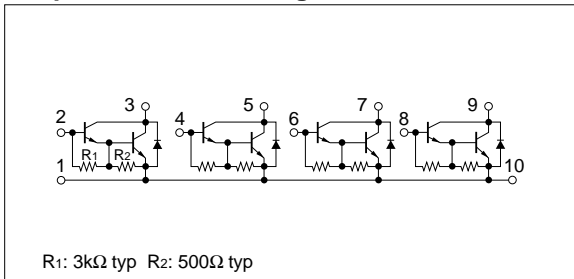
| Symbol | Ratings | Unit |
|-----------|---|------------------|
| V_{CB0} | 120 | V |
| V_{CEO} | 100 | V |
| V_{EBO} | 6 | V |
| I_c | 4 | A |
| I_{CP} | 8 ($PW \leq 10\text{ms}$, $D_u \leq 50\%$) | A |
| P_T | 4 ($T_a=25^\circ\text{C}$) | W |
| | 20 ($T_c=25^\circ\text{C}$) | |
| T_j | 150 | $^\circ\text{C}$ |
| T_{stg} | -40 to +150 | $^\circ\text{C}$ |

Electrical characteristics

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

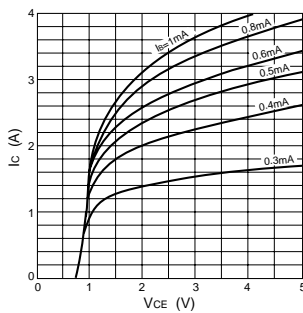
| Symbol | Specification | | | Unit | Conditions |
|---------------|---------------|-----|-----|---------------|---|
| | min | typ | max | | |
| I_{CBO} | | | 100 | μA | $V_{CB}=120\text{V}$ |
| I_{EBO} | | | 10 | mA | $V_{EB}=6\text{V}$ |
| V_{CEO} | 100 | | | V | $I_c=10\text{mA}$ |
| h_{FE} | 1000 | | | | $V_{CE}=4\text{V}$, $I_c=2\text{A}$ |
| $V_{CE(sat)}$ | | | 2.0 | V | $I_c=2\text{A}$, $I_b=10\text{mA}$ |
| t_{on} | | 0.6 | | μs | $V_{CC} \doteq 40\text{V}$, $I_c=2\text{A}$, $I_{B1}=-I_{B2}=10\text{mA}$ |
| t_{stg} | | 5.0 | | μs | |
| t_f | | 2.0 | | μs | |

Equivalent circuit diagram

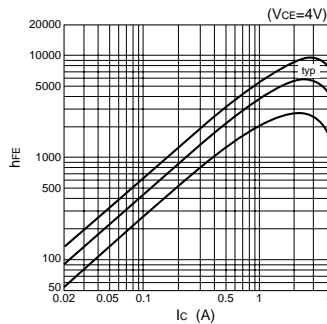


Characteristic curves

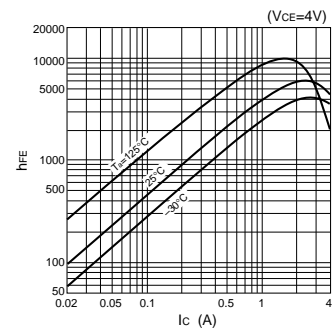
I_c - V_{CE} Characteristics (Typical)



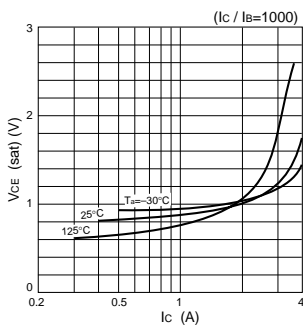
h_{FE} - I_c Characteristics (Typical)



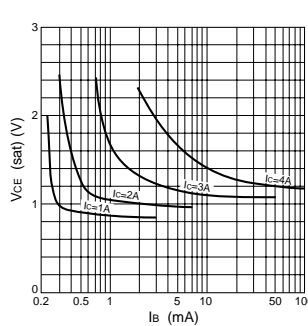
h_{FE} - I_c Temperature Characteristics (Typical)



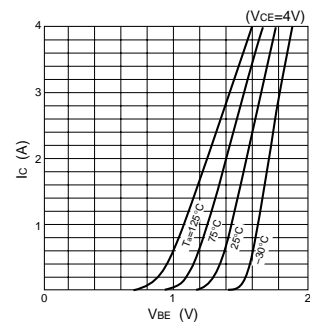
$V_{CE(sat)}$ - I_c Temperature Characteristics (Typical)



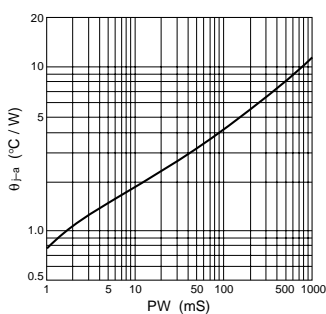
$V_{CE(sat)}$ - I_b Characteristics (Typical)



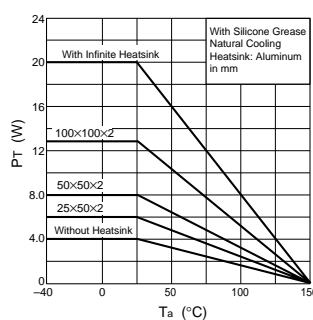
I_c - V_{BE} Temperature Characteristics (Typical)



θ_{j-a} -PW Characteristics



P_T - T_a Characteristics



Safe Operating Area (SOA)

