

Absolute maximum ratings

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

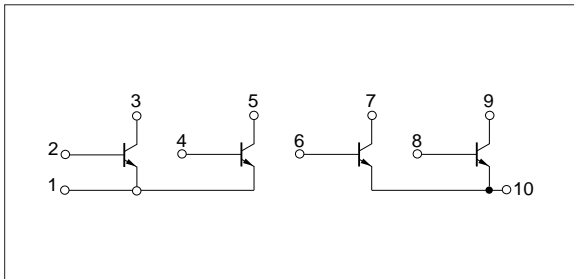
Symbol	Ratings	Unit
V_{CB0}	120	V
V_{CEO}	100	V
V_{EBO}	6	V
I_c	5	A
I_{cP}	8 (PW \leq 1ms, Du \leq 25%)	A
I_B	1	A
P_T	4 ($T_a=25^\circ\text{C}$)	W
	20 ($T_c=25^\circ\text{C}$)	
T_j	150	$^\circ\text{C}$
T_{stg}	-40 to +150	$^\circ\text{C}$

Electrical characteristics

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

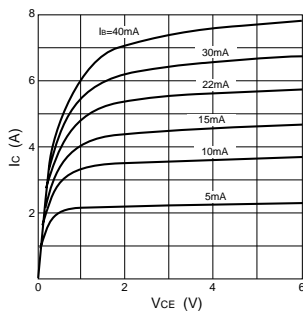
Symbol	Specification			Unit	Conditions
	min	typ	max		
I_{CBO}			10	μA	$V_{CB}=120\text{V}$
I_{EBO}			10	μA	$V_{EB}=6\text{V}$
V_{CER}	100			V	$I_{CER}=100\mu\text{A}$, $R_{BE}=1\text{k}\Omega$
h_{FE}	200	400	1000		$V_{CE}=1\text{V}$, $I_c=2\text{A}$
$V_{CE(sat)}$		0.25	0.5	V	$I_c=2\text{A}$, $I_B=10\text{mA}$
$V_{BE(sat)}$		0.9	1.3	V	

Equivalent circuit diagram

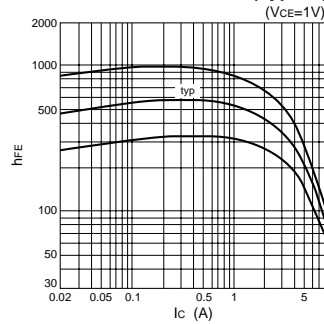


Characteristic curves

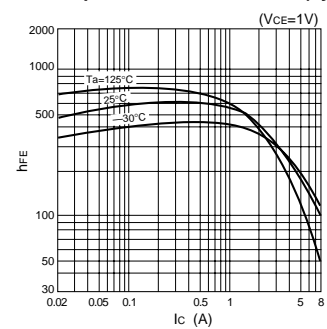
I_c - V_{CE} Characteristics (Typical)



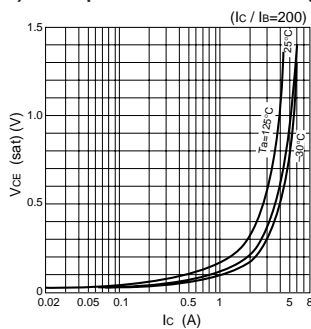
h_{FE} - I_c Characteristics (Typical)



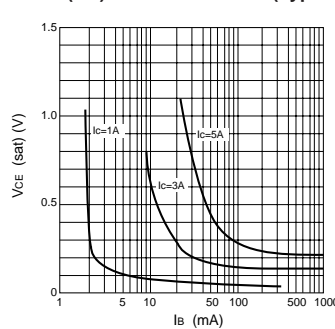
h_{FE} - I_c Temperature Characteristics (Typical)



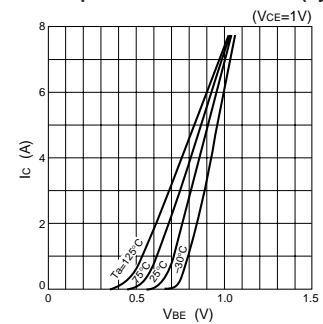
$V_{CE(sat)}$ - I_c Temperature Characteristics (Typical)



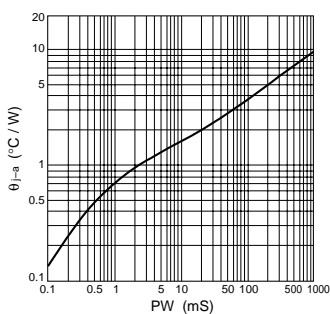
$V_{CE(sat)}$ - I_B Characteristics (Typical)



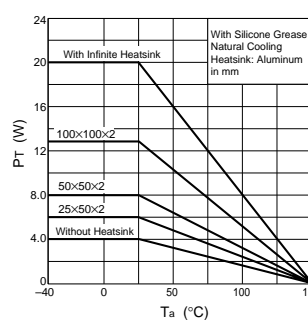
I_c - V_{BE} Temperature Characteristics (Typical)



θ_{j-a} -PW Characteristics



P_T - T_a Characteristics



Safe Operating Area (SOA)

