

Absolute maximum ratings

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

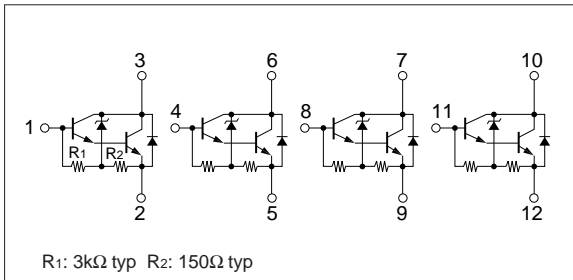
Symbol	Specification	Unit
V_{CB0}	60 ± 10	V
V_{CEO}	60 ± 10	V
V_{EBO}	6	V
I_c	4	A
I_{CP}	6 (PW $\leq 10\text{ms}$, $D_u\leq 50\%$)	A
I_B	0.5	A
P_T	5 ($T_a=25^\circ\text{C}$)	W
	40 ($T_c=25^\circ\text{C}$)	
T_j	150	$^\circ\text{C}$
T_{stg}	-40 to +150	$^\circ\text{C}$

Electrical characteristics

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

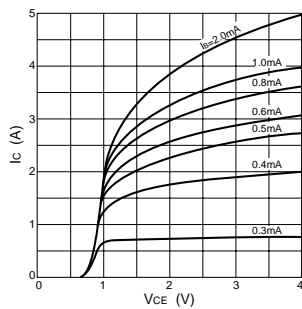
Symbol	Specification			unit	Conditions
	min	typ	max		
I_{CB0}			10	μA	$V_{CB}=50\text{V}$
I_{EBO}			10	mA	$V_{EB}=6\text{V}$
V_{CEO}	50	60	70	V	$I_c=10\text{mA}$
h_{FE}	2000				$V_{CE}=4\text{V}$, $I_c=3\text{A}$
$V_{CE(sat)}$			1.5	V	$I_c=3\text{A}$, $I_B=10\text{mA}$

Equivalent circuit diagram

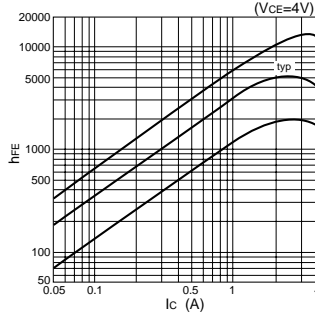


Characteristic curves

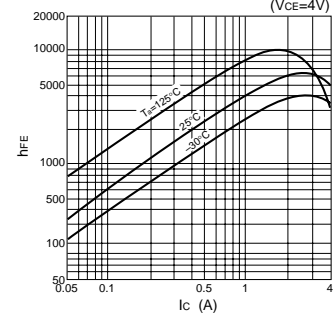
I_c - V_{CE} Characteristics (Typical)



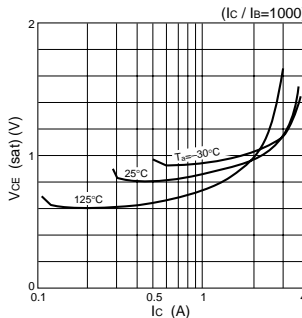
h_{FE} - I_c Characteristics (Typical)



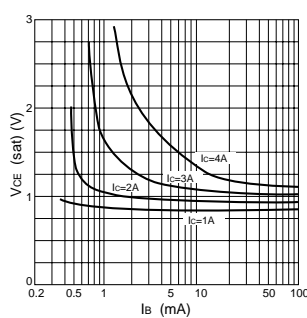
h_{FE} - I_c Temperature Characteristics (Typical)



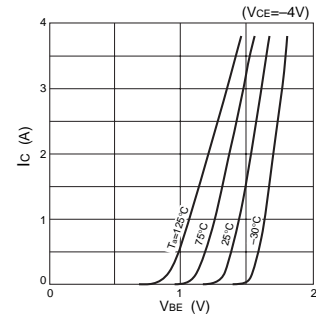
$V_{CE(sat)}$ - I_c Temperature Characteristics (Typical)



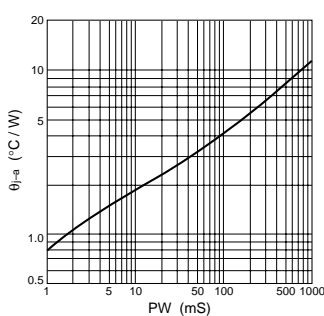
$V_{CE(sat)}$ - I_B Characteristics (Typical)



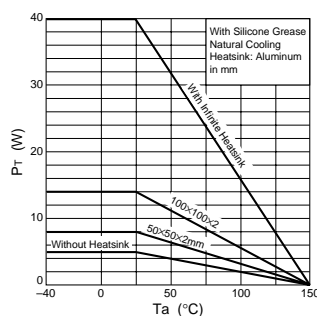
I_c - V_{BE} Temperature Characteristics (Typical)



θ_{j-a} -PW Characteristics



P_T - T_a Characteristics



Safe Operating Area (SOA)

