

Absolute maximum ratings

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

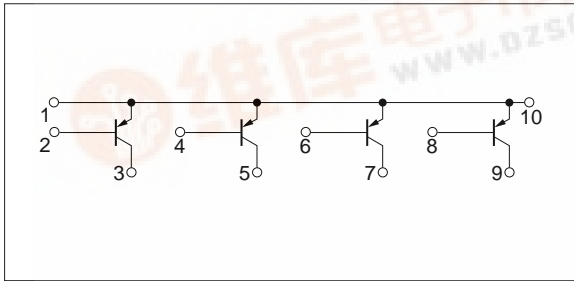
Symbol	Ratings	Unit
V_{CBO}	-60	V
V_{CEO}	-60	V
V_{EBO}	-6	V
I_c	-3	A
I_{CP}	-6 (PW \leq 10ms, $D_u\leq$ 50%)	A
P_T	4 ($T_a=25^\circ\text{C}$)	W
	20 ($T_c=25^\circ\text{C}$)	
T_j	150	$^\circ\text{C}$
T_{stg}	-40 to +150	$^\circ\text{C}$

Electrical characteristics

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

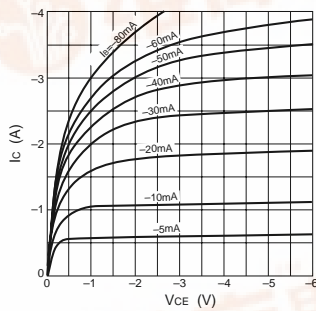
Symbol	Specification			Unit	Conditions
	min	typ	max		
I_{CBO}			-100	μA	$V_{CB}=-60\text{V}$
I_{EBO}			-100	μA	$V_{EB}=-6\text{V}$
V_{CEO}	-60			V	$I_c=-25\text{mA}$
h_{FE}	40				$V_{CE}=-4\text{V}$, $I_c=-1\text{A}$
$V_{CE(sat)}$			-1.0	V	$I_c=-2\text{A}$, $I_B=-0.2\text{A}$
t_{on}		0.25		μs	$V_{CC}\div-12\text{V}$, $I_c=-2\text{A}$,
t_{stg}		0.75		μs	$I_c=-2\text{A}$,
t_f		0.25		μs	$I_{B1}=-I_{B2}=-0.2\text{A}$

Equivalent circuit diagram

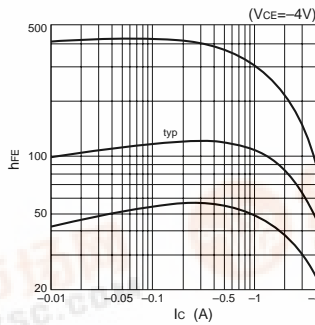


Characteristic curves

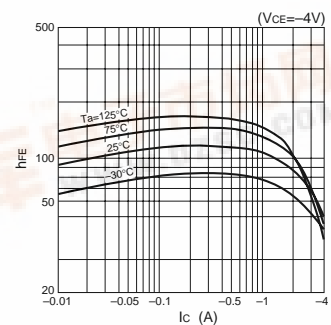
I_c - V_{CE} Characteristics (Typical)



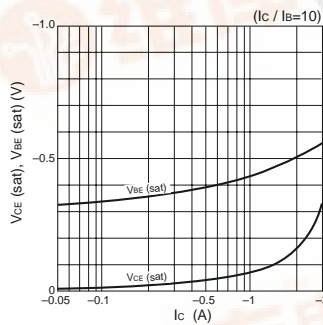
h_{FE} - I_c Characteristics (Typical)



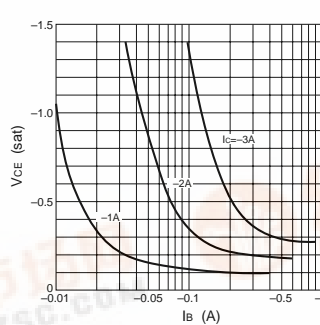
h_{FE} - I_c Temperature Characteristics (Typical)



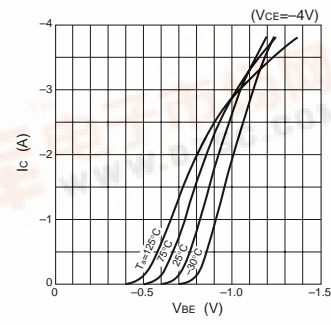
$V_{CE(sat)}$, $V_{BE(sat)}$ - I_c Characteristics (Typical)



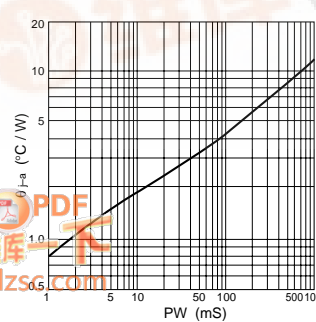
$V_{CE(sat)}$ - I_B Characteristics (Typical)



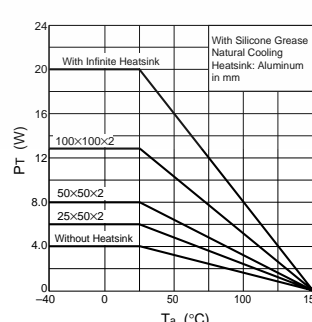
I_c - V_{BE} Temperature Characteristics (Typical)



θ_{j-a} -PW Characteristics



P_T - T_a Characteristics



Safe Operating Area (SOA)

