

### Absolute maximum ratings

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

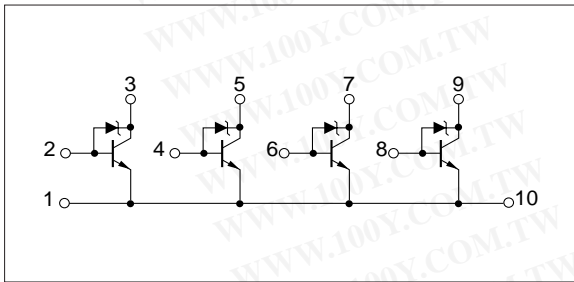
Symbol	Ratings	Unit
$V_{CBO}$	35±5	V
$V_{CEO}$	35±5	V
$V_{EBO}$	6	V
$I_c$	3	A
$I_B$	1	A
$P_T$	4 ( $T_a=25^\circ\text{C}$ )	W
	20 ( $T_c=25^\circ\text{C}$ )	
$T_j$	150	$^\circ\text{C}$
$T_{stg}$	-40 to +150	$^\circ\text{C}$

### Electrical characteristics

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

Symbol	Specification			Unit	Conditions
	min	typ	max		
$I_{CBO}$			10	$\mu\text{A}$	$V_{CB}=30\text{V}$
$I_{EBO}$			10	$\mu\text{A}$	$V_{EB}=6\text{V}$
$V_{CEO}$	30		40	V	$I_c=25\text{mA}$
$h_{FE}$	500				$V_{CE}=4\text{V}, I_c=0.5\text{A}$
$V_{CE(sat)}$			0.5	V	$I_c=1\text{A}, I_B=5\text{mA}$

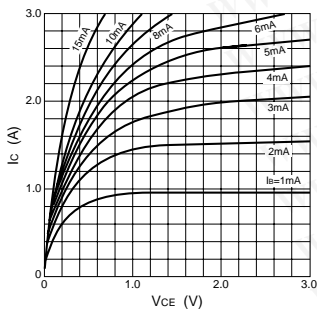
### Equivalent circuit diagram



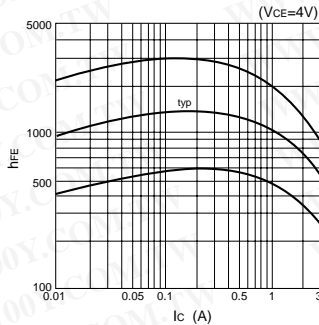
勝特力材料 886-3-5753170  
 勝特力电子(上海) 86-21-54151736  
 勝特力电子(深圳) 86-755-83298787  
[Http://www.100y.com.tw](http://www.100y.com.tw)

### Characteristic curves

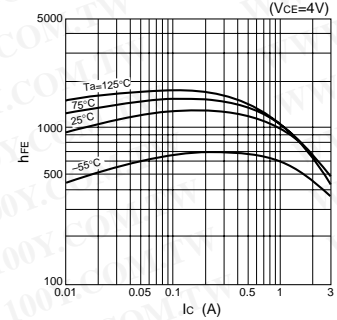
$I_c$ - $V_{CE}$  Characteristics (Typical)



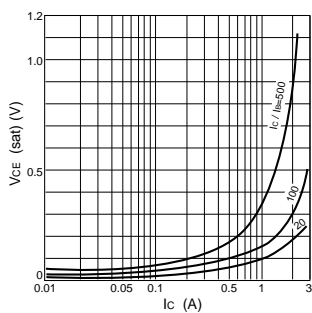
$h_{FE}$ - $I_c$  Characteristics (Typical)



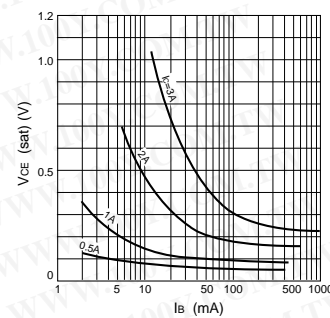
$h_{FE}$ - $I_c$  Temperature Characteristics (Typical)



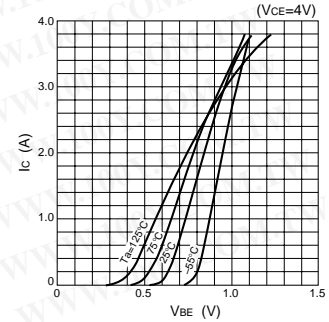
$V_{CE(sat)}$ - $I_c$  Characteristics (Typical)



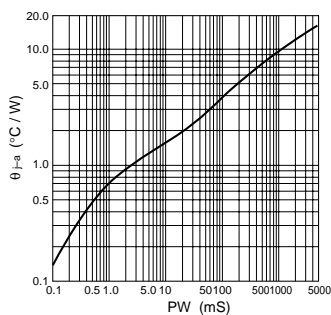
$V_{CE(sat)}$ - $I_B$  Characteristics (Typical)



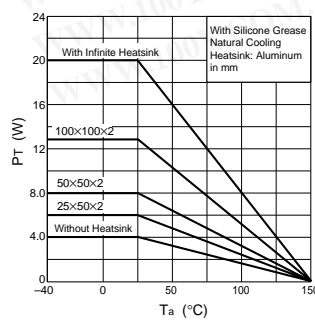
$I_c$ - $V_{BE}$  Temperature Characteristics (Typical)



$\theta_{j-a}$ -PW Characteristics



$P_T$ - $T_a$  Characteristics



Safe Operating Area (SOA)

