

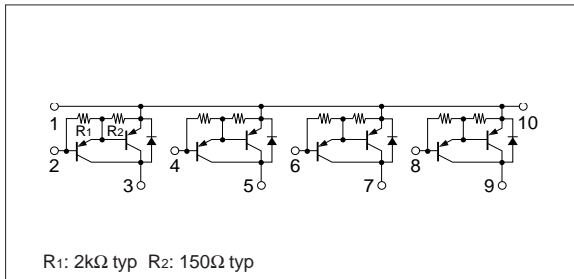
## Absolute maximum ratings (Ta=25°C)

Symbol	Ratings	Unit
V <sub>CB0</sub>	-50	V
V <sub>CEO</sub>	-50	V
V <sub>EBO</sub>	-6	V
I <sub>c</sub>	-4	A
I <sub>CP</sub>	-8 (PW≤10ms, Du≤50%)	A
P <sub>T</sub>	4 (Ta=25°C)	W
	20 (Tc=25°C)	
T <sub>j</sub>	150	°C
T <sub>stg</sub>	-40 to +150	°C

## Electrical characteristics (Ta=25°C)

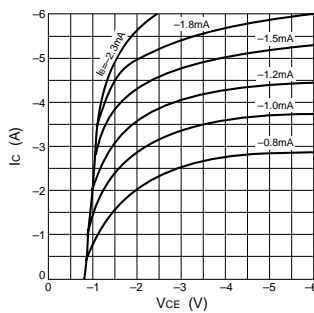
Symbol	Specification			Unit	Conditions
	min	typ	max		
I <sub>CB0</sub>			-100	μA	V <sub>CB</sub> =-50V
I <sub>EBO</sub>			-10	mA	V <sub>EB</sub> =-6V
V <sub>CEO</sub>	-50			V	I <sub>c</sub> =-10mA
h <sub>FE</sub>	1000				V <sub>CE</sub> =-4V, I <sub>c</sub> =-3A
V <sub>CE(sat)</sub>			-2.0	V	I <sub>c</sub> =-3A, I <sub>B</sub> =-10mA
ton		0.4		μs	V <sub>CC</sub> =-30V, I <sub>c</sub> =-3A, I <sub>B1</sub> =-I <sub>B2</sub> =-10mA
tstg		0.8		μs	
tf		0.6		μs	

## Equivalent circuit diagram

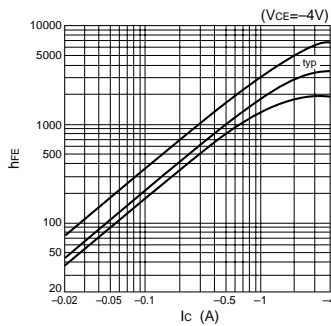


## Characteristic curves

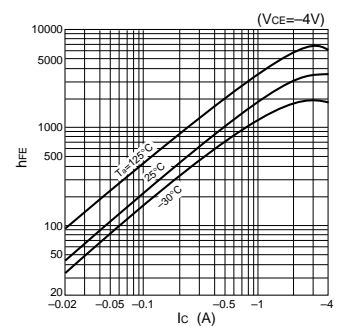
I<sub>c</sub>-V<sub>CE</sub> Characteristics (Typical)



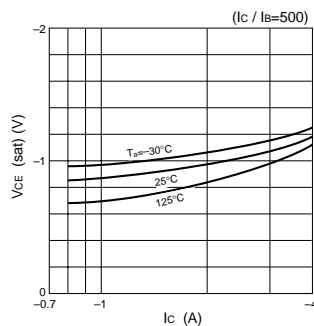
h<sub>FE</sub>-I<sub>c</sub> Characteristics (Typical)



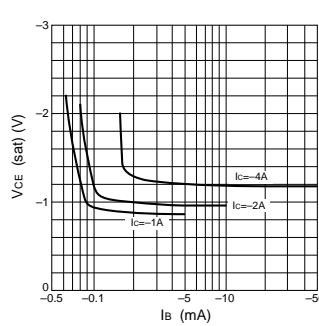
h<sub>FE</sub>-I<sub>c</sub> Temperature Characteristics (Typical)



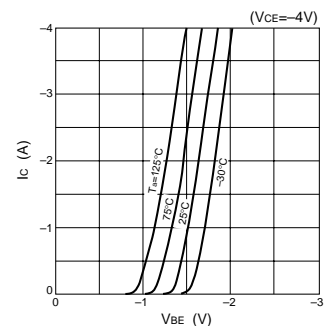
V<sub>CE(sat)</sub>-I<sub>c</sub> Temperature Characteristics (Typical)



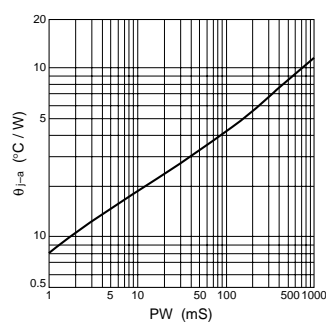
V<sub>CE(sat)</sub>-I<sub>B</sub> Characteristics (Typical)



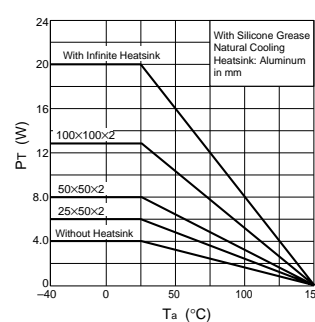
I<sub>c</sub>-V<sub>BE</sub> Temperature Characteristics (Typical)



θ<sub>J-a</sub>-PW Characteristics



P<sub>T</sub>-T<sub>a</sub> Characteristics



Safe Operating Area (SOA)

