

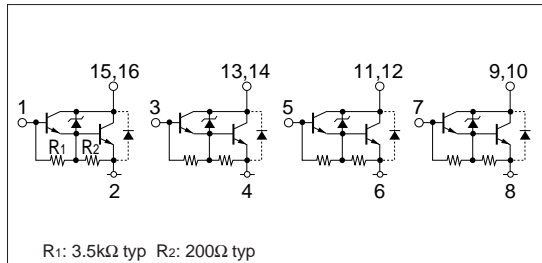
### Absolute maximum ratings (Ta=25°C)

Symbol	Ratings	Unit
V <sub>CB0</sub>	60±10	V
V <sub>CEO</sub>	60±10	V
V <sub>EBO</sub>	6	V
I <sub>c</sub>	1.5	A
I <sub>CP</sub>	2.5 (PW≤1ms, Du≤10%)	A
I <sub>B</sub>	0.1	A
P <sub>T</sub>	3 (Ta=25°C)	W
T <sub>j</sub>	150	°C
T <sub>stg</sub>	-40 to +150	°C
θ <sub>j-a</sub>	41.6	°C/W

### Electrical characteristics (Ta=25°C)

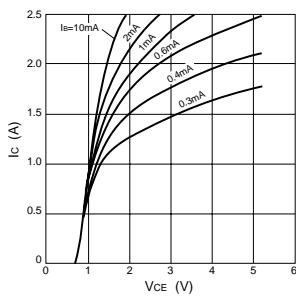
Symbol	Specification			Unit	Conditions
	min	typ	max		
I <sub>CB0</sub>			10	μA	V <sub>CB</sub> =50V
I <sub>EBO</sub>	1.1		3.5	mA	V <sub>EB</sub> =6V
V <sub>CEO</sub>	50	60	70	V	I <sub>c</sub> =10mA
h <sub>FE</sub>	2000	5000	12000		V <sub>CE</sub> =4V, I <sub>c</sub> =1A
V <sub>CE(sat)</sub>		1.2	1.4	V	I <sub>c</sub> =1A, I <sub>B</sub> =2mA
V <sub>BE(sat)</sub>		1.8	2.2	V	
V <sub>FEC</sub>		1.3	1.8	V	I <sub>FEC</sub> =1A
t <sub>on</sub>		0.5		μs	V <sub>CC</sub> ÷30V,
t <sub>stg</sub>		4.0		μs	I <sub>c</sub> =1A,
t <sub>f</sub>		1.0		μs	I <sub>B1</sub> =-I <sub>B2</sub> =2mA
f <sub>T</sub>		50		MHz	V <sub>CE</sub> =12V, I <sub>E</sub> =-0.1A
C <sub>ob</sub>		25		pF	V <sub>CB</sub> =10V, f=1MHz

### Equivalent circuit diagram

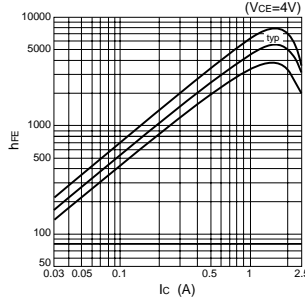


### Characteristic curves

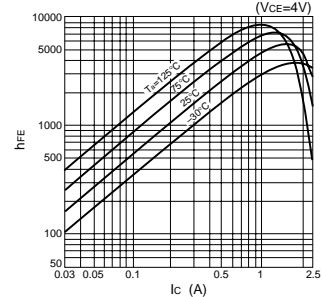
I<sub>c</sub>-V<sub>CE</sub> Characteristics (Typical)



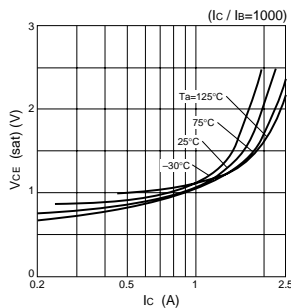
h<sub>FE</sub>-I<sub>c</sub> Characteristics (Typical)



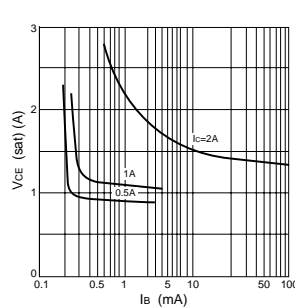
h<sub>FE</sub>-I<sub>c</sub> Temperature Characteristics (Typical)



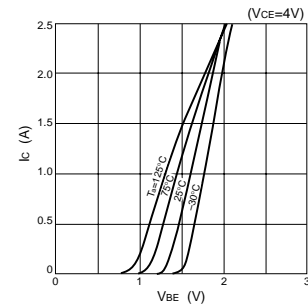
V<sub>CE(sat)</sub>-I<sub>c</sub> Temperature Characteristics (Typical)



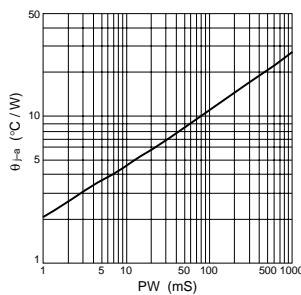
V<sub>CE(sat)</sub>-I<sub>B</sub> Characteristics (Typical)



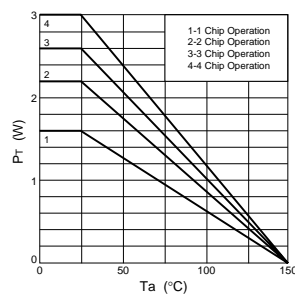
I<sub>c</sub>-V<sub>BE</sub> Temperature Characteristics (Typical)



θ<sub>j-a</sub>-PW Characteristics



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



Safe Operating Area (SOA)

