

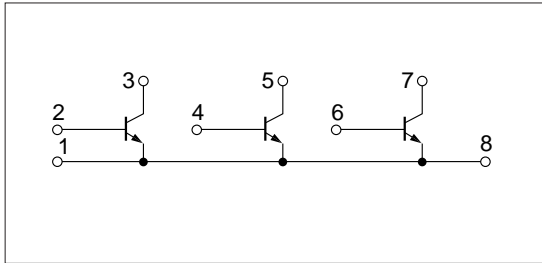
**Absolute maximum ratings** (Ta=25°C)

Symbol	Ratings	Unit
V <sub>CB0</sub>	60	V
V <sub>CEO</sub>	60	V
V <sub>EBO</sub>	6	V
I <sub>c</sub>	3	A
I <sub>CP</sub>	6 (PW≤10ms, Du≤50%)	A
P <sub>T</sub>	3 (Ta=25°C)	W
	15 (Tc=25°C)	
T <sub>j</sub>	150	°C
T <sub>stg</sub>	-40 to +150	°C

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

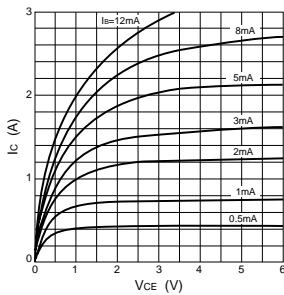
Symbol	Specification			Unit	Conditions
	min	typ	max		
I <sub>CB0</sub>			100	μA	V <sub>CB</sub> =60V
I <sub>EBO</sub>			100	μA	V <sub>EB</sub> =6V
V <sub>CEO</sub>	60			V	I <sub>c</sub> =25mA
h <sub>FE</sub>	300				V <sub>CE</sub> =4V, I <sub>c</sub> =0.5A
V <sub>CE(sat)</sub>			1.0	V	I <sub>c</sub> =1A, I <sub>B</sub> =10mA
t <sub>on</sub>		0.8		μs	V <sub>CC</sub> ≐20V, I <sub>c</sub> =1A, I <sub>B1</sub> =15mA, I <sub>B2</sub> =-30mA
t <sub>stg</sub>		3.0		μs	
t <sub>f</sub>		1.2		μs	

**Equivalent circuit diagram**

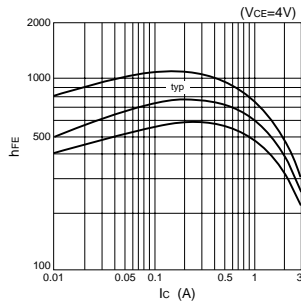


**Characteristic curves**

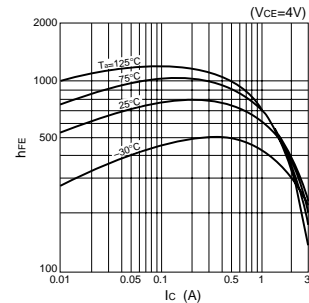
I<sub>c</sub>-V<sub>CE</sub> Characteristics (Typical)



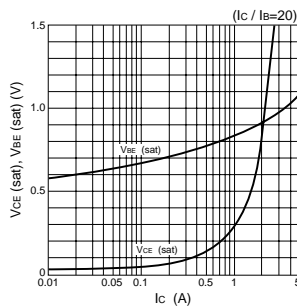
h<sub>FE</sub>-I<sub>c</sub> Characteristics (Typical)



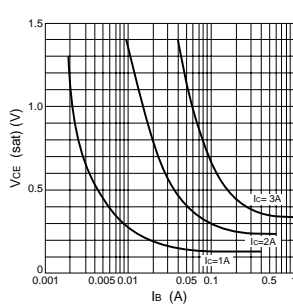
h<sub>FE</sub>-I<sub>c</sub> Temperature Characteristics (Typical)



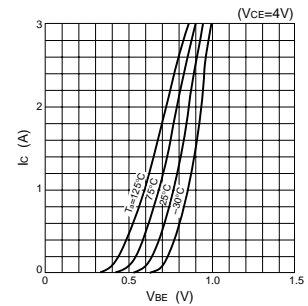
V<sub>CE(sat)</sub>, V<sub>BE(sat)</sub>-I<sub>c</sub> Characteristics (Typical)



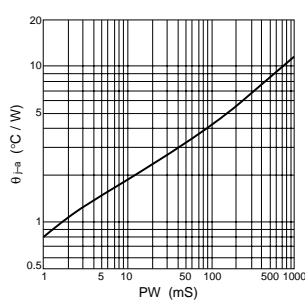
V<sub>CE(sat)</sub>-I<sub>B</sub> Characteristics (Typical)



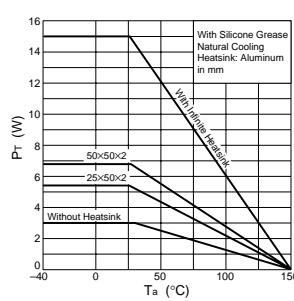
I<sub>c</sub>-V<sub>BE</sub> Temperature Characteristics (Typical)



θ<sub>J-a</sub>-PW Characteristics



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



Safe Operating Area (SOA)

