

## Absolute maximum ratings

(Ta=25°C)

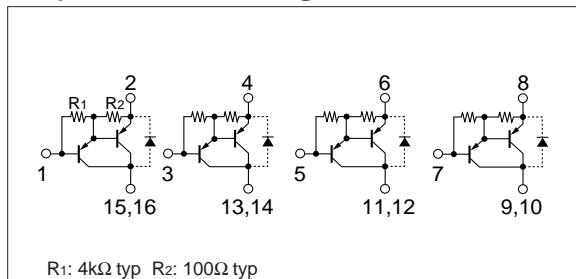
Symbol	Ratings	Unit
V <sub>CBO</sub>	-60	V
V <sub>CEO</sub>	-60	V
V <sub>EBO</sub>	-6	V
I <sub>c</sub>	-1.5	A
I <sub>CP</sub>	-2.5 (PW≤1ms, Du≤10%)	A
I <sub>B</sub>	-0.1	A
P <sub>T</sub>	3 (Ta=25°C)	W
T <sub>j</sub>	150	°C
T <sub>stg</sub>	-40 to +150	°C
θ <sub>j-a</sub>	41.6	°C/W

## Electrical characteristics

(Ta=25°C)

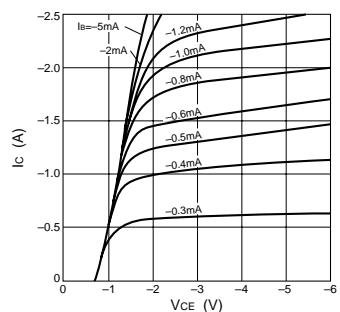
Symbol	Specification			Unit	Conditions
	min	typ	max		
I <sub>CBO</sub>			-10	μA	V <sub>CB</sub> =-60V
I <sub>EBO</sub>			-3	mA	V <sub>EB</sub> =-6V
V <sub>CEO</sub>	-60			V	I <sub>c</sub> =-10mA
h <sub>FE</sub>	2000		12000		V <sub>CE</sub> =-4V, I <sub>c</sub> =-1A
V <sub>CE(sat)</sub>			-1.4	V	I <sub>c</sub> =-1A, I <sub>B</sub> =-2mA
V <sub>BE(sat)</sub>			-2.2	V	

## ■ Equivalent circuit diagram

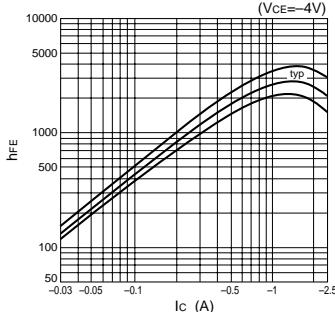


## Characteristic curves

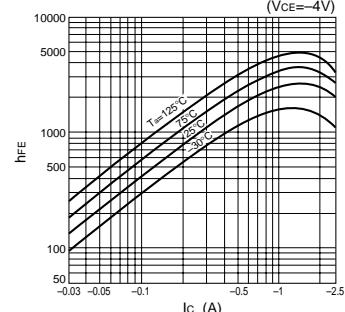
### I<sub>c</sub>-V<sub>CE</sub> Characteristics (Typical)



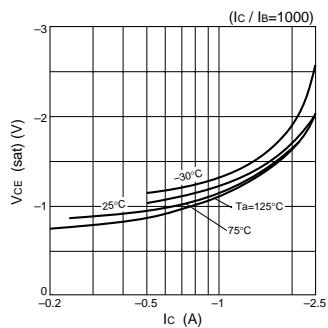
### h<sub>FE</sub>-I<sub>c</sub> Characteristics (Typical)



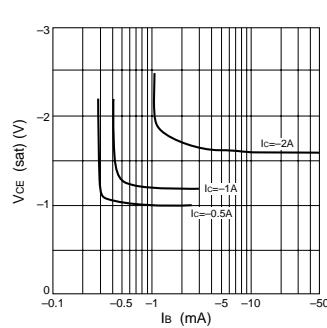
### h<sub>FE</sub>-I<sub>c</sub> Temperature Characteristics (Typical)



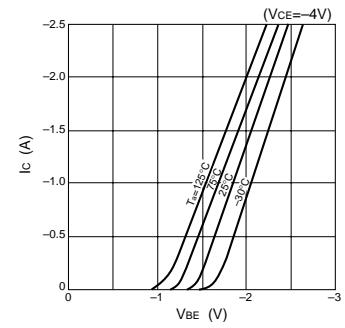
### V<sub>CE(sat)</sub>-I<sub>c</sub> Temperature Characteristics (Typical)



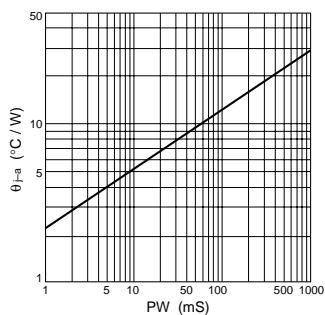
### V<sub>CE(sat)</sub>-I<sub>b</sub> Characteristics (Typical)



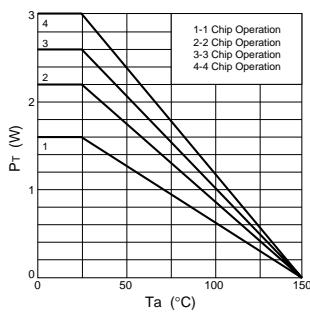
### I<sub>c</sub>-V<sub>BE</sub> Temperature Characteristics (Typical)



### θ<sub>j-a</sub>-PW Characteristics



### P<sub>T</sub>-Ta Characteristics



### Safe Operating Area (SOA)

