

# Surface-mount Power Transistor Array SPF0001

## Absolute Maximum Ratings (Ta=25°C)

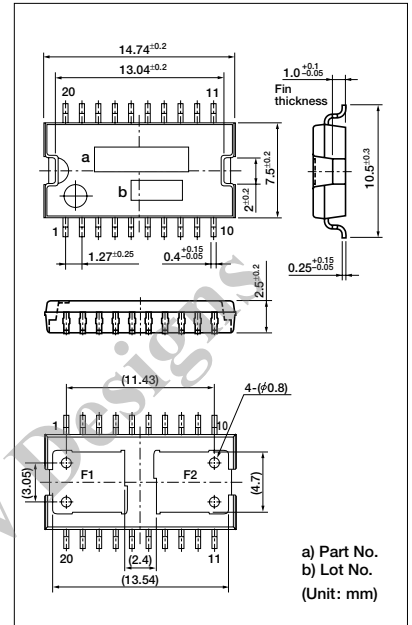
Symbol	Ratings	Unit
V <sub>CB0</sub>	115±10	V
V <sub>CEO</sub>	115±10	V
V <sub>EB0</sub>	6	V
I <sub>c</sub>	±6 (pulse ±10)	A
I <sub>b</sub>	1	A
P <sub>T</sub> *	2.5 (Ta=25°C)	W
T <sub>j</sub>	150	°C
T <sub>stg</sub>	-55 to +150	°C

\* Use glass epoxy substrate (FR4) 70mm×100mm×1.6mm

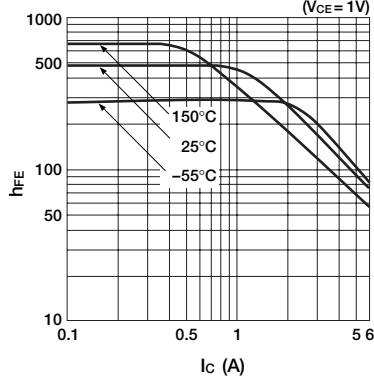
## Electrical Characteristics (Ta=25°C)

Symbol	Test Conditions	Ratings			Unit
		min	typ	max	
I <sub>CB0</sub>	V <sub>CB</sub> =105V			10	A
I <sub>EB0</sub>	V <sub>EB</sub> =6V			10	A
V <sub>CEO</sub>	I <sub>c</sub> =50mA	105	115	125	V
h <sub>FE</sub>	V <sub>CE</sub> =1V, I <sub>c</sub> =1A	400	800	1500	
V <sub>CE(sat)</sub>	I <sub>c</sub> =1.2A, I <sub>b</sub> =12mA		0.08	0.12	V
V <sub>FEC</sub>	I <sub>FEC</sub> =6A		1.25	1.5	V
Es/b	L=10mH	45			mJ

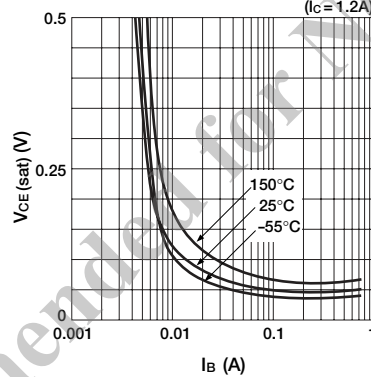
## External Dimensions SPF 20pin



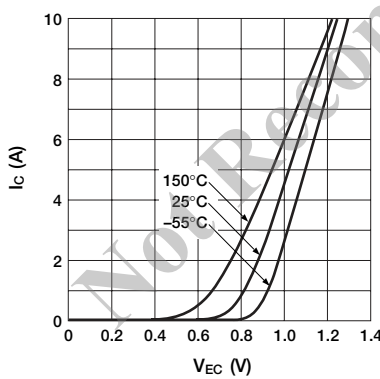
■ h<sub>FE</sub>—I<sub>c</sub> Temperature Characteristics (typ.) (V<sub>CE</sub>=1V)



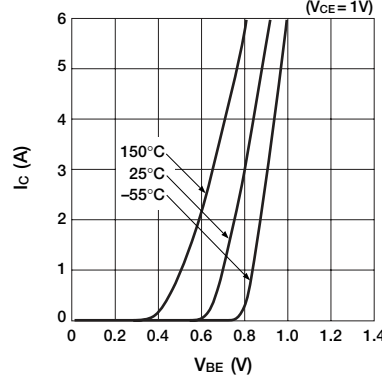
■ V<sub>CE(sat)</sub>—I<sub>b</sub> Temperature Characteristics (typ.) (I<sub>c</sub>=1.2A)



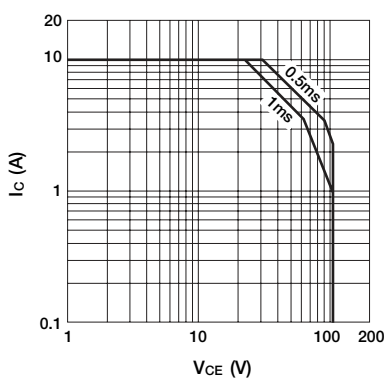
■ I<sub>c</sub>—V<sub>EC</sub> Temperature Characteristics (typ.)



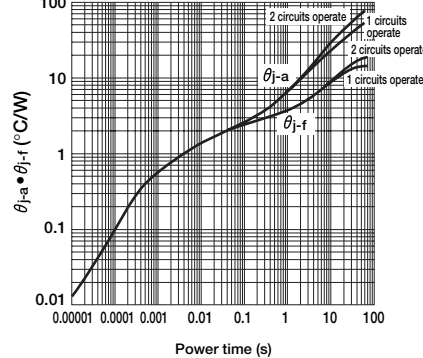
■ I<sub>c</sub>—V<sub>BE</sub> Temperature Characteristics (typ.) (V<sub>CE</sub>=1V)



■ Safe Operating Area (single pulse)



■ Transient thermal resistance characteristics (82×36×1mm at the time of mounting the recommended pattern of the glass epoxy board)



## Equivalent Circuit Diagram

