

# Power Transistor Array STA335A

## Absolute Maximum Ratings (Ta=25°C)

Symbol	Ratings	Unit
VCBO	35±5	V
VCEO	35±5	V
VEBO	6	V
IC	3	A
IB	1	A
PT	2.5 (Ta=25°C) 12 (Tc=25°C)	W
Tj	150	°C
Tstg	-55 to +150	°C

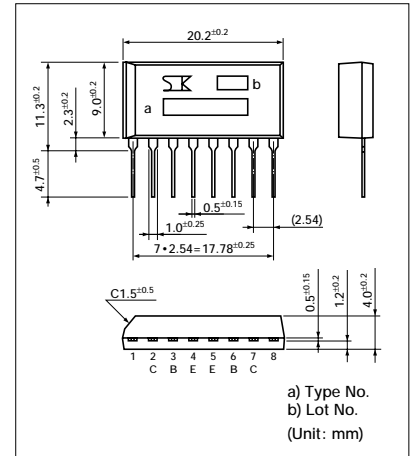
## Electrical Characteristics (Ta=25°C)

Symbol	Test Conditions	Ratings	Unit
ICBO	V <sub>CB</sub> = 30V	10max	μA
IEBO	V <sub>EB</sub> = 6V	10max	μA
VCEO	I <sub>C</sub> = 25mA	35±5	V
hFE	V <sub>CE</sub> = 4V, I <sub>C</sub> = 0.5A	500min	
V <sub>CE</sub> (sat)	I <sub>C</sub> = 1A, I <sub>B</sub> = 5mA	0.5max	V
Es/b	L = 10mH, single pulse	150min	mJ

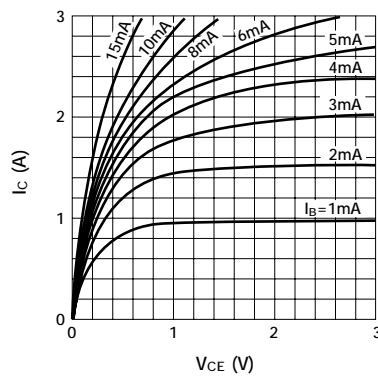
## Typical Switching Characteristics

V <sub>CC</sub> (V)	R <sub>L</sub> (Ω)	I <sub>C</sub> (A)	V <sub>BB1</sub> (V)	V <sub>BB2</sub> (V)	I <sub>B1</sub> (mA)	I <sub>B2</sub> (mA)	t <sub>on</sub> (μs)	t <sub>stg</sub> (μs)	t <sub>f</sub> (μs)
12	12	1	10	-5	5	5	1.3	4.7	1.2

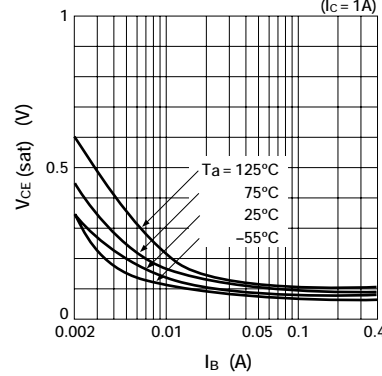
## External Dimensions STA3 (LF400A)



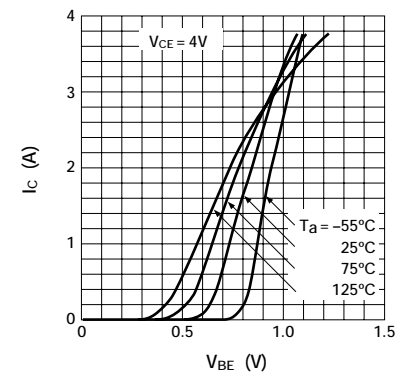
### IC — VCE Characteristics (typ.)



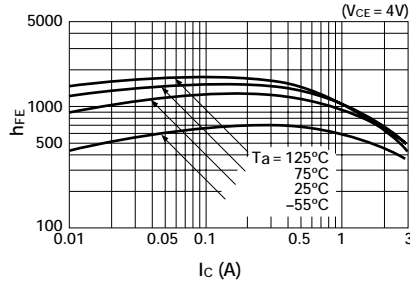
### VCE (sat) — IB Temperature Characteristics (IC = 1A)



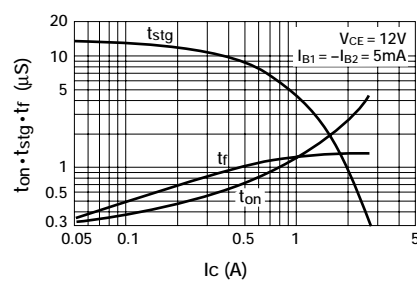
### IC — VBE Temperature Characteristics (typ.)



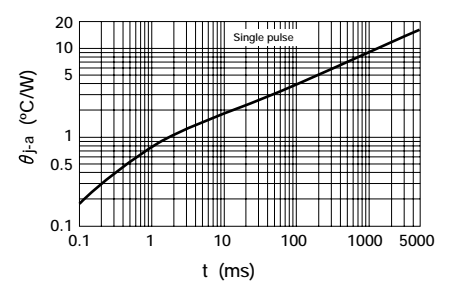
### hFE — IC Temperature Characteristics (typ.) (VCE = 4V)



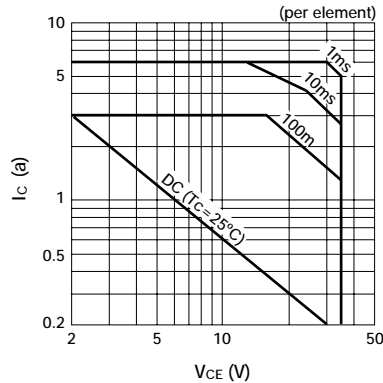
### ton · tstg · tf — IC Characteristics (typ.)



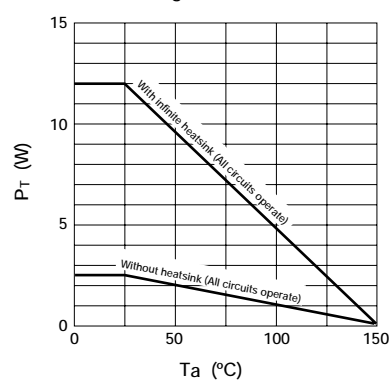
### θJA — t Characteristics



### Safe Operating Area (single pulse) (per element)



### PT — Ta Derating



## Equivalent Circuit Diagram

