

Power Transistor Array STA461C

Absolute Maximum Ratings (Ta=25°C)

Symbol	Ratings	Unit
V _{CB0}	65±5	V
V _{CE0}	65±5	V
V _{EB0}	6	V
I _C	±6 (pulse ±10)	A
I _B	1	A
P _T	3.2 (Ta = 25°C) 18 (Tc = 25°C)	W
T _J	150	°C
Tstg	-55 to +150	°C

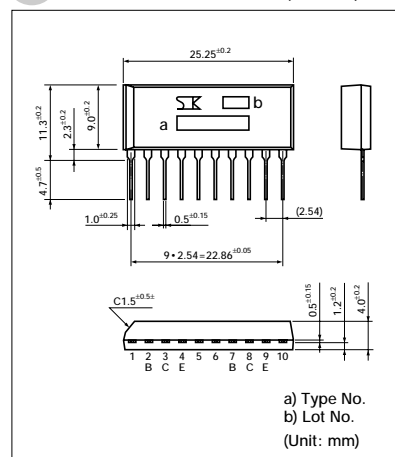
Electrical Characteristics (Ta=25°C)

Symbol	Test Conditions	Ratings	Unit
I _{CB0}	V _{CB} = 60V	10max	μA
I _{EB0}	V _{EB} = 6V	10max	μA
V _{CE0}	I _C = 50mA	60 to 70	V
h _{FE}	V _{CE} = 1V, I _C = 1A	400 to 1500	
V _{CE(sat)}	I _C = 1.5A, I _B = 15mA	0.15max	V
V _{FEC}	I _{FEC} = 6A	1.5max	V
Es/b	L = 10mH, single pulse	80min	mJ

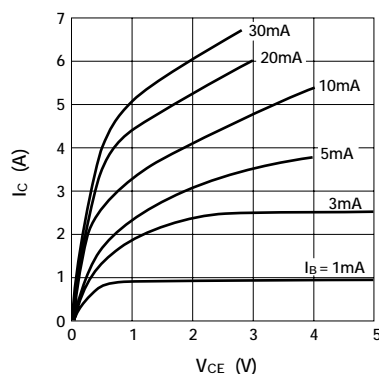
Typical Switching Characteristics

V _{CC} (V)	R _L (Ω)	I _C (A)	V _{BB1} (V)	V _{BB2} (V)	I _{B1} (mA)	I _{B2} (mA)	t _{on} (μs)	t _{stg} (μs)	t _f (μs)
12	12	1	10	-5	30	-30	0.2	3.9	0.2

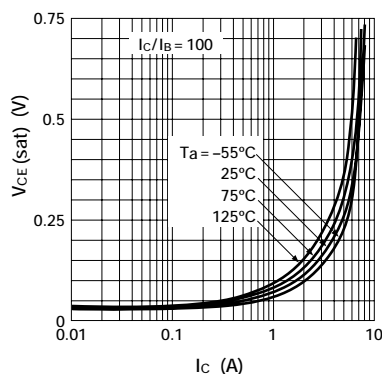
External Dimensions STA4 (LF400B)



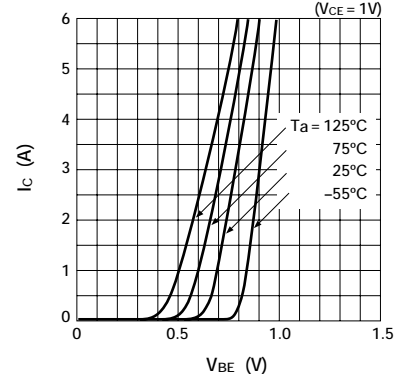
I_C — V_{CE} Characteristics (typ.)



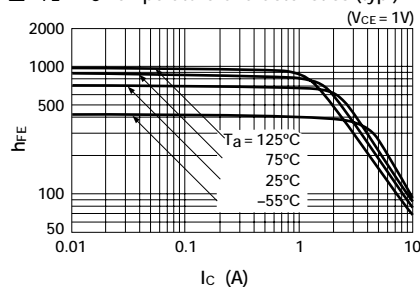
V_{CE(sat)} — I_C Temperature Characteristics (typ.)



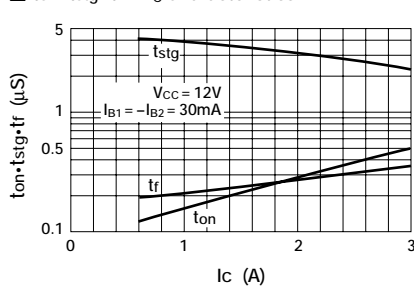
I_C — V_{BE} Temperature Characteristics (typ.)



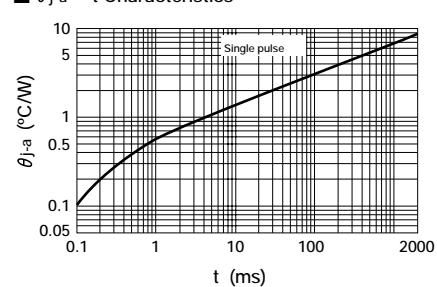
h_{FE} — I_C Temperature Characteristics (typ.)



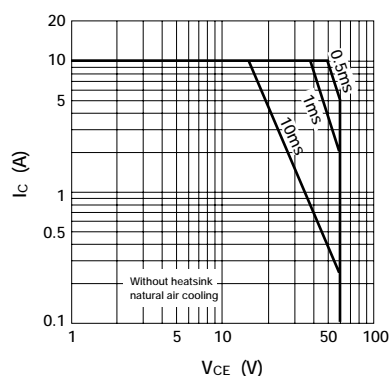
t_{on} · t_{stg} · t_f — I_C Characteristics



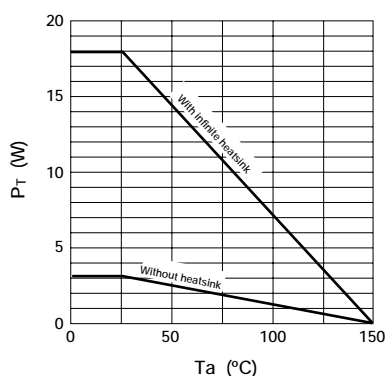
θ_{J-a} — t Characteristics



Safe Operating Area (single pulse)



P_T — Ta Derating



Equivalent Circuit Diagram

