

Power Transistor Array STA463C

Absolute Maximum Ratings (Ta=25°C)

Symbol	Ratings	Unit
V _{CB0}	115±10	V
V _{CE0}	115±10	V
V _{EBO}	6	V
I _C	±6 (pulse ±10)	A
I _B	1	A
P _T	3.2 (Ta=250°C)	W
	18 (Tc=25°C)	W
T _J	150	°C
T _{stg}	-55 to +150	°C

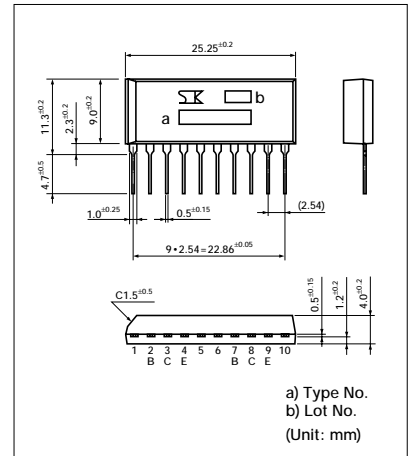
Electrical Characteristics (Ta=25°C)

Symbol	Test Conditions	Ratings	Unit
I _{CB0}	V _{CB} = 105V	10max	μA
I _{EBO}	V _{EB} = 6V	10max	μA
V _{CE0}	I _C = 50mA	105 to 125	V
h _{FE}	V _{CE} = 1V, I _C = 1A	400 to 1500	
V _{CE(sat)}	I _C = 1.2A, I _B = 12mA	0.12max	V
V _{FEC}	I _{FEC} = 6A	1.5max	V
Es/b	L = 10mH, single pulse	45min	mJ

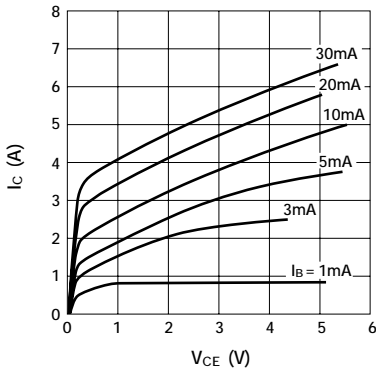
Typical Switching Characteristics

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	5.7	0.4

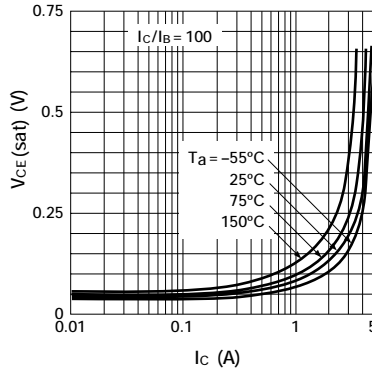
External Dimensions STA4 (LF400B)



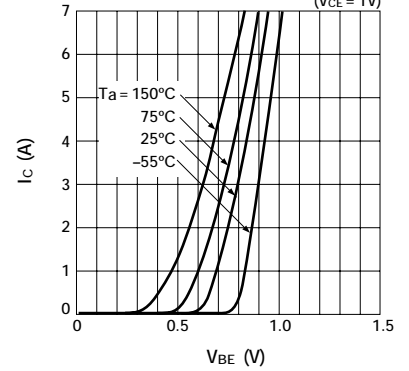
■ I_C — V_{CE} Characteristics (typ.)



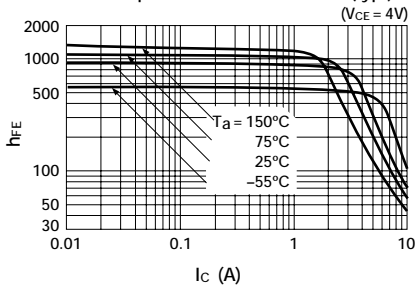
■ V_{CE(sat)} — I_C Temperature Characteristics (typ.)



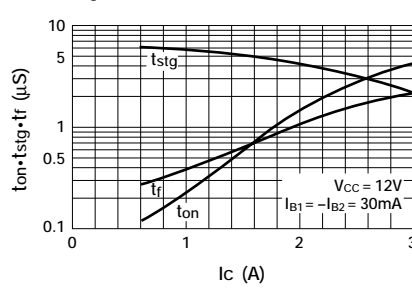
■ I_C — V_{BE} Temperature Characteristics (typ.)



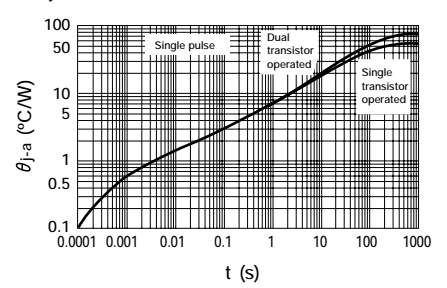
■ h_{FE} — I_C Temperature Characteristics (typ.)



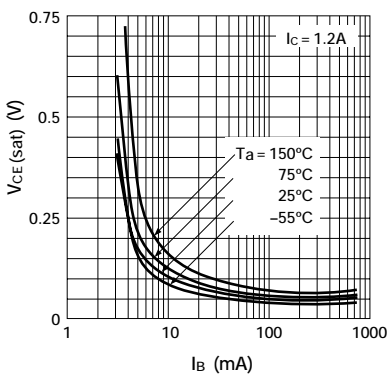
■ t_{on} · t_{stg} · t_f — I_C Characteristics



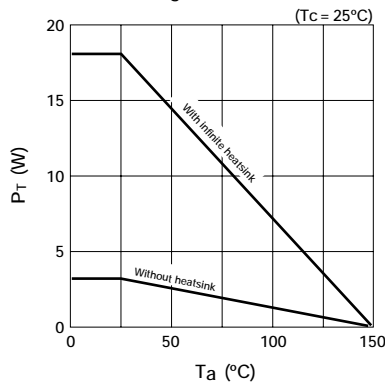
■ θ_{J-a} — t Characteristics



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



■ P_T — T_a Derating



Equivalent Circuit Diagram

