

Power Transistor MN611S

Absolute Maximum Ratings (Ta=25°C)

Symbol	Ratings	Unit
V _{CB0}	115±10	V
V _{CE0}	115±10	V
V _{EB0}	6	V
I _C	±6 (pulse ±10)	A
I _B	1	A
P _C	50 (Tc=25°C) 1.2 (Ta=25°C, No Fin)	W
T _J	150	°C
T _{stg}	-55 to +150	°C

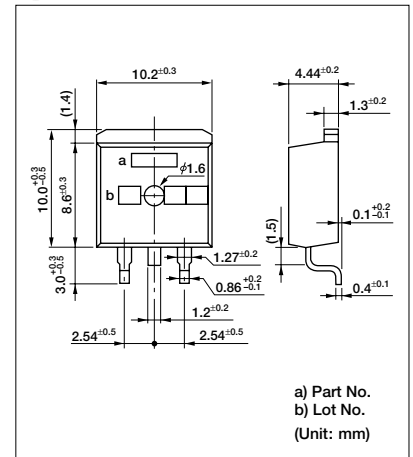
Electrical Characteristics (Ta=25°C)

Symbol	Test Conditions	Ratings			Unit
		min	typ	max	
I _{CB0}	V _{CB} =105V			10	μA
I _{EB0}	V _{EB} =6V			10	μA
V _{CE0}	I _C =50mA	105	115	125	V
h _{FE}	V _{CE} =1V, I _C =1A	400	800	1500	
V _{CE} (sat)	I _C =1.2A, I _B =12mA		0.08	0.12	V
V _{FEC}	I _{FEC} =6A		1.25	1.5	V
E _s /B	L=10mA	45			mJ

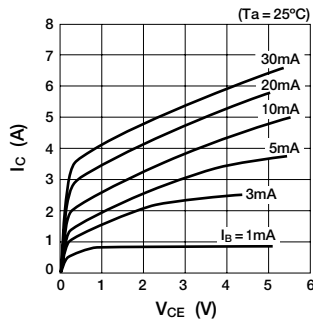
Typical Switching Characteristics

V _{CC} (V)	R _L (Ω)	V _{BB1} (V)	V _{BB2} (V)	I _C (A)	I _{B1} (mA)	I _{B2} (mA)	t _{on} (μs)	t _{stg} (μs)	t _f (μs)
12	12	10	-5	1	30	-30	0.2typ	5.7typ	0.4typ

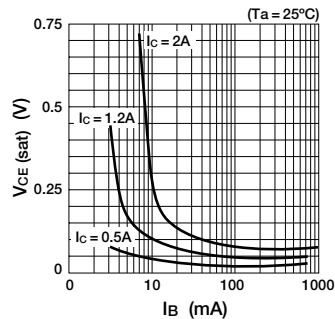
External Dimensions T0220S



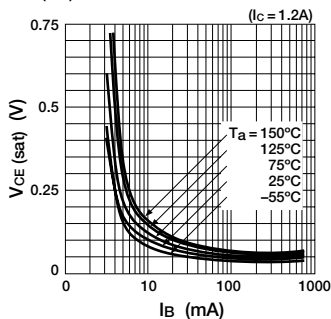
I_C — V_{CE} Characteristics (typ.)



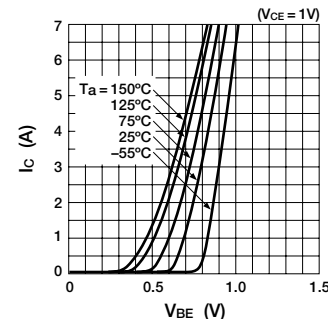
V_{CE}(sat) — I_B Characteristics (typ.)



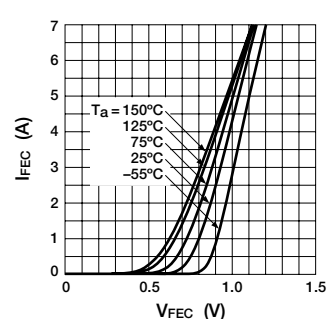
V_{CE}(sat) — I_B Temperature Characteristics (typ.)



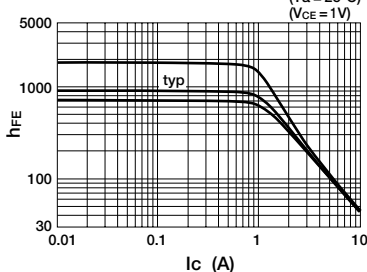
I_C — V_{BE} Temperature Characteristics (typ.)



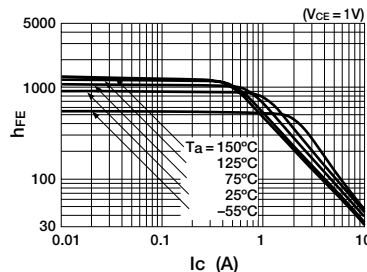
I_{FEC} — V_{FEC} Temperature Characteristics (typ.)



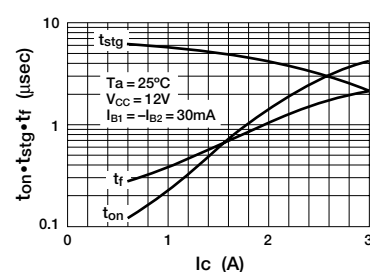
h_{FE} — I_C Characteristics (typ.)



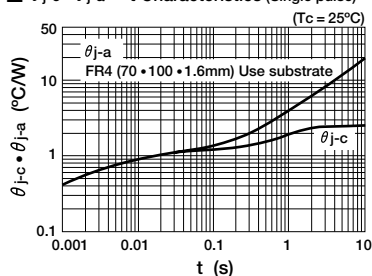
h_{FE} — I_C Temperature Characteristics (typ.)



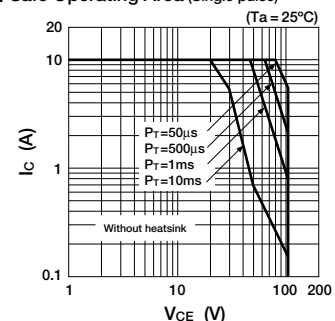
t_{on} • t_{stg} • t_f — I_C Characteristics (typ.)



θ_{J-C} • θ_{J-a} — t Characteristics (Single pulse)



Safe Operating Area (Single pulse)



P_T — T_a Derating

