

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 (T _c =25°C)	W
	1.2 (Ta=25°C, No Fin)	
T _J	150	°C
T _{stg}	-55 to +150	°C

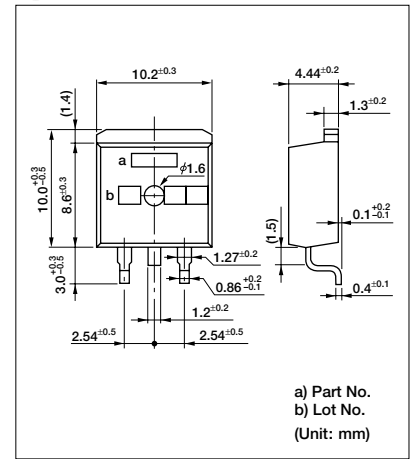
Electrical Characteristics (Ta=25°C)

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
ES/B	L=10mA	45			mJ

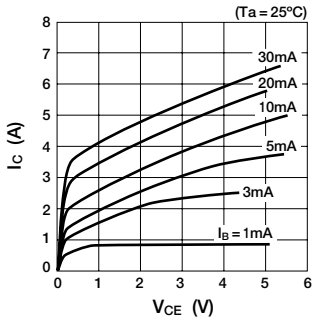
Typical Switching Characteristics

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

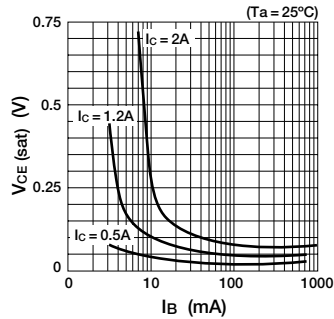
External Dimensions T0220S



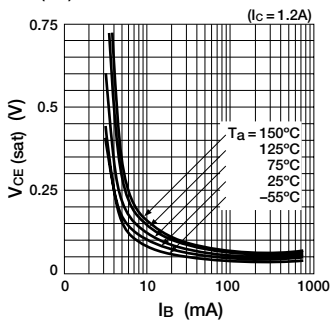
■ I_c—V_{CE} Characteristics (typ.)



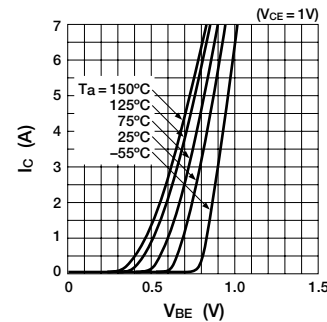
■ V_{CE (sat)}—I_B Characteristics (typ.)



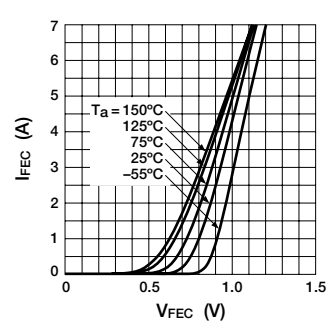
■ V_{CE (sat)}—I_B Temperature Characteristics (typ.)



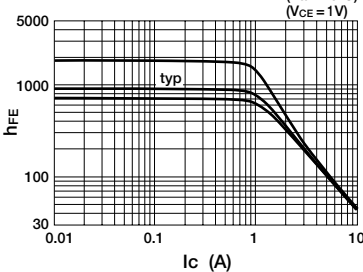
■ I_c—V_{BE} Temperature Characteristics (typ.)



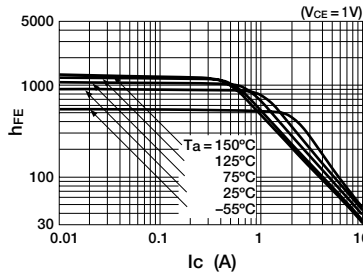
■ I_{FEC}—V_{FEC} Temperature Characteristics (typ.)



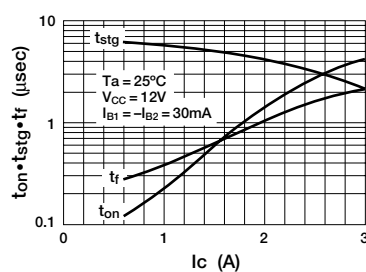
■ h_{FE}—I_c Characteristics (typ.)



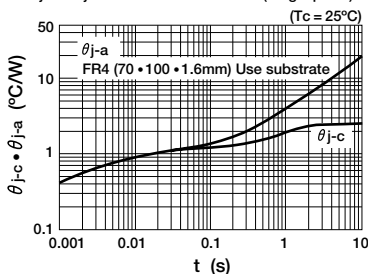
■ h_{FE}—I_c Temperature Characteristics (typ.)



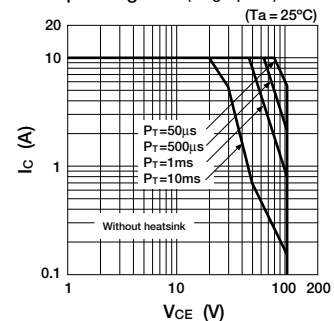
■ t_{on}•t_{stg}•t_f—I_c Characteristics (typ.)



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



■ Safe Operating Area (Single pulse)



■ P_T—T_a Derating

