

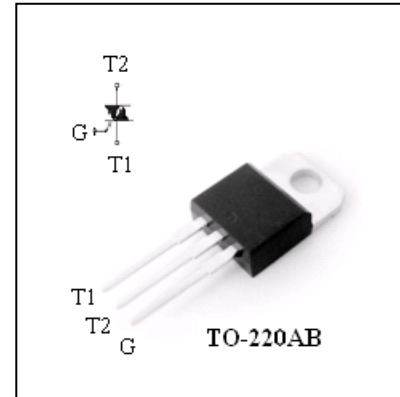
PST BTB24 TRIAC

•Package

TO-220AB

•Main Feature (T_j=25°C)

Symbol	Value	Unit
I _{T(RMS)}	24	A
V _{DRM} / V _{RRM}	≥800	V
I _{TSM}	240	A



•Absolute ratings (Limiting Values)

Symbol	Parameter	Value	Unit
I _{T(RMS)}	Rms on-state current(full sine wave)	24	A
I _{TSM}	Non-repetitive Peak on-state Current (T _j =25°C, tp=20ms)	240	A
I ² t	I ² t for fusing(tp=10ms)	200	A ² S
I _{GM}	Peak gate current	5	A
V _{GM}	Peak gate voltage	16	V
P _{GM}	Peak gate power	40	W
P _{G(AV)}	Average gate power	1	W
dI _T /dt	Repetitive rate of rise of on-state current after triggering (I _T =6A, I _G =0.2A, dI _G /dt=0.2A/us)	I - II - III 50 IV 50	A/μ s
T _{stg}	Storage temperature	-40--+150	°C
T _j	Operating junction temperature	-40--+125	°C

•Thermal Resistances

Symbol	Parameter	Condition	Type	Unit
R _{th j-c}	Thermal Resistance, Junction to case	One cycle	BTA	2.1 °C/W
			BTB	1.2 °C/W
R _{th j-a}	Thermal Resistance, Junction to ambient	————	60	°C/W

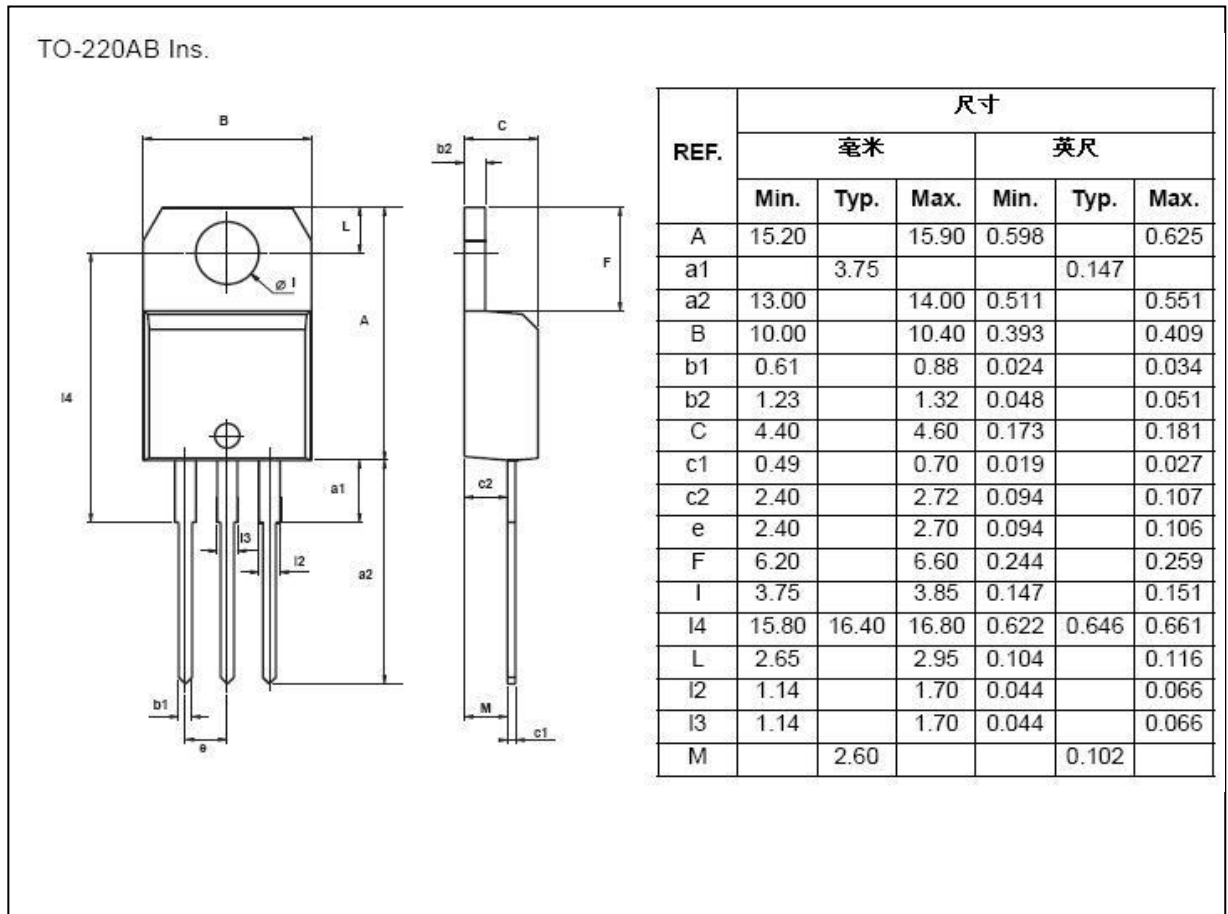


● **Electrical characteristics (T_j=25°C unless otherwise stated)**

Symbol	Conditions	Type	Max	Unit
I _{GT}	BTB24 V _D =12V I _T =0.1A			
	T2+ G+	11	18	mA
	T2+ G-	15	30	mA
	T2- G-	20	30	mA
I _H	V _D =12V I _{GT} =0.1A		50	mA
V _{TM}	I _T =24A	—1.25—	1.5	V
I _{DRM}	V _{DRM} =800V		10	μ A
I _{RRM}	V _{RRM} =800V		15	μ A
V _{GT}	V _D =12V I _T =0.1A T _j =125°C	—	1.5	V
I _D	V _D =V _{DRM} (MAX) T _j =125°C	—	0.5	mA

● **Dynamic characteristics (T_j=25°C unless otherwise stated)**

Symbol	Test Conditions	Type	Min	Max	Unit
dv/dt	V _{DM} =67%V _{DM} (MAX) T _j =125°C	500	250	—	V/μ s
(dv/dt) _c	(di/dt) _c =7A/ms T _j =125°C	—	10		μ s

● Measure of package TO-220AB:


●Electrocircuit:

