

TRIAC

BTB04

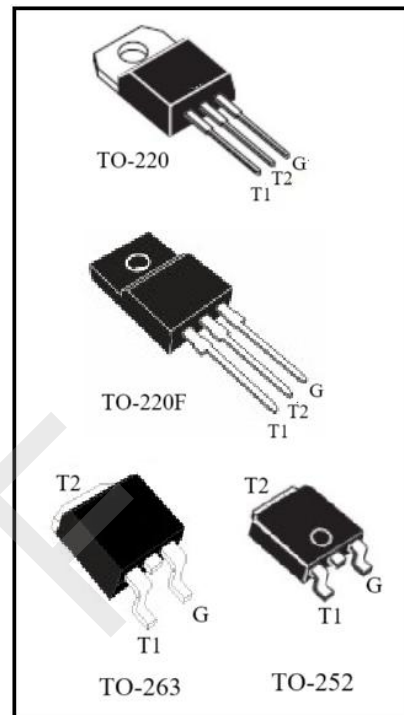
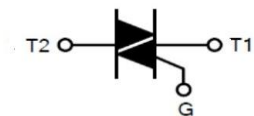
FEATURES

- Planar passivated for voltage ruggedness and reliability
- Low gate trigger current
- Low holding current
- High thermal cycling performance
- High voltage capability
- High current surge capability

APPLICATIONS

- Mains power AC switching
- Static relays
- Light dimmers
- Heater Control
- Motor Speed Controller
- Mixer

SYMBOL:



ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	VALUE		UNIT
Repetitive Peak Off-State Voltages	V_{DRM}, V_{RRM}	BTB04-600(D/A)	600	V
		BTB04-800(D/A)	800	
RMS on-State Current	$I_{T(RMS)}$	4		A
Non-Repetitive Peak On-State Current	I_{TSM}	40		A
I^2t for fusing	I^2t	6		A ² s
Repetitive rate of rise of on-state current after triggering	di/dt	I	50	A/uS
		II	50	
		III	50	
		IV	10	
Peak gate current	I_{GM}	4		A
Peak Gate Power	P_{GM}	4		W
Average Gate Power	$P_{G(AV)}$	1		W
Operating junction temperature	T_J	-40~+125		°C
Storage Temperature	T_{STG}	-40 ~ +150		°C

ELECTRICAL CHARACTERISTICS (T_J=25°C)

PARAMETER	SYMBOL	TEST CONDITIONS		MIN	MAX		UNITS
					D	A	
Peak Repetitive Forward or Reverse Blocking Current	I _{DRM} I _{RRM}	V _{AK} = Rated V _{DRM} or V _{RRM} ;			10		uA
Gate Trigger Current	I _{GT}	V _D =12V, R _L =33Ω	I		5	10	mA
			II		5	10	
			III		5	10	
			IV		10	20	
Gate Trigger Voltage	V _{GT}	V _D =12V, R _L =33Ω			1.5		V
Gate Non-Trigger Voltage	V _{GD}	V _D = V _{DRM} , R _L = 3.3 kΩ, T _j = 125 °C		0.2			V
Peak Forward On-State Voltage	V _{TM}	I _T =6.0A,			1.55		V
Latch Current	I _L	I _G = 1.2I _{GT}	I		10	20	mA
			II		20	40	
			III		10	20	
			IV		10	20	
Holding Current	I _H	I _T =0.1A			10	15	mA
Critical Rate of Rise of Off-State Voltage	dV/dt	V _D =67%V _{DRM} , R _{GK} =1kΩ,		10			V/μs