

TRIAC

BTB06

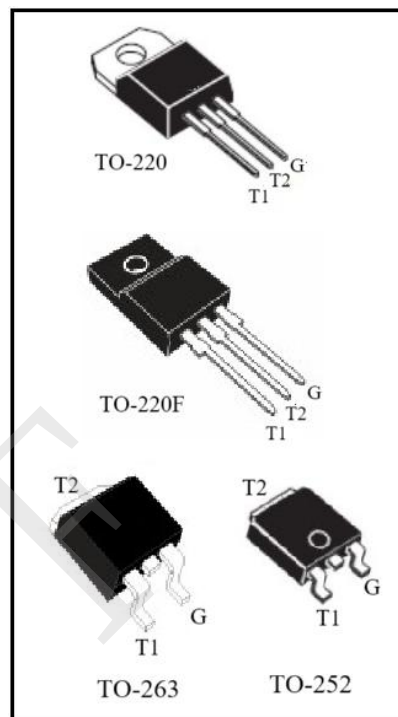
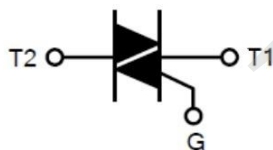
FEATURES

- 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

SYMBOL:



ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	VALUE		UNIT
Repetitive Peak Off-State Voltages	V_{DRM}, V_{RRM}	BTB06-600(C/B)	600	V
		BTB06-800(C/B)	800	
RMS on-State Current	$I_{T(RMS)}$	6		A
Non-Repetitive Peak On-State Current	I_{TSM}	60		A
I^2t for fusing	I^2t	21		A ² s
Repetitive rate of rise of on-state current after triggering	di/dt	50		A/ μ S
Peak gate current	I_{GM}	4		A
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 ($T_J=25^{\circ}\text{C}$)

Parameter	Symbol	Test Conditions	MIN	MAX		Units
				C	B	
Peak Repetitive Forward or Reverse Blocking Current	I_{DRM} I_{RRM}	$V_{\text{AK}} = \text{Rated } V_{\text{DRM}} \text{ or } V_{\text{RRM}}$		5		μA
Gate Trigger Current	I_{GT}	$V_{\text{D}}=12\text{V}, R_{\text{L}}=33\Omega$	I	25	50	mA
			II	25	50	
			III	25	50	
			IV	50	100	
Gate Trigger Voltage	V_{GT}	$V_{\text{D}}=12\text{V}, R_{\text{L}}=33\Omega$		1.5		V
Gate Non-Trigger Voltage	V_{GD}	$V_{\text{D}} = V_{\text{DRM}}, R_{\text{L}} = 3.3 \text{ k}\Omega, T_{\text{J}} = 125^{\circ}\text{C}$	0.2			V
Peak Forward On-State Voltage	V_{TM}	$I_{\text{T}}=8.5\text{A},$		1.55		V
Latch Current	I_{L}	$I_{\text{G}}=1.2I_{\text{GT}}$	I	40	50	mA
			II	80	100	
			III	40	50	
			IV	40	50	
Holding Current	I_{H}	$I_{\text{T}}=0.1\text{A}$		25	50	mA
Critical Rate of Rise of Off-State Voltage	dV/dt	$V_{\text{D}}=67\%V_{\text{DRM}}, T_{\text{J}}=25^{\circ}\text{C},$ Gate open	200			V/ μs