

**BTA04/BTB04**

**TO-220**

**Triac Series**

Absolute maximum ratings

Parameter	Symbol	Value	Unit	Test condition
peak repetitive off-stage voltage	$V_{DRM}, V_{RRM}$	600	V	
on-state RMS current	$I_T(RMS)$	4	A	$T_C \leq 105^\circ C$
NON repetitive surge peak on-state current	$I_{TSM}$	35	A	$T_p=20ms, T_j=25^\circ C, F=50HZ$
critical rate of rise on-state current	$di/dt (Q_{1-3})$	50	A/ $\mu s$	
peak gate current	$I_{GM}$	4	A	
average gate power dissipation	$P_G(AV)$	0.5	W	
storage temperature range	$T_{stg}$	-40 to +150	$^\circ C$	
operating junction temperature range	$T_j$	125	$^\circ C$	

Electrical characteristics (  $T_j=25^\circ C$ ) unless otherwise specified

Parameter	Symbol	Value	Unit	Test condition
gate trigger current	$I_{GT}$	$\leq 50$	mA	T2+G+ $V_D=12V, I_T=0.1A$
		$\leq 50$	mA	T2+G- $V_D=12V, I_T=0.1A$
		$\leq 50$	mA	T2-G- $V_D=12V, I_T=0.1A$
		$\leq 100$	mA	T2-G+ $V_D=12V, I_T=0.1A$
gate trigger voltage	$V_{GT}$	$\leq 1.30$	V	$V_D=12V, I_T=0.1A$
hold current	$I_H$	$\leq 25$	mA	$I_T=0.5A$
critical rate of rise off-state voltage	$dv/dt$	$\geq 10$	V/ $\mu s$	$V_D=67\%V_{DRM}$
on-state voltage	$V_{TM}$	$\leq 1.65$	V	$I_T=5.5A$
off-state leakage current	$I_{DRM}$	$\leq 1.00$	mA	$V_D=V_{DRM}; T_j=125^\circ C$
thermal resistance	$R_{th(j-a)}$	60	$^\circ C/W$	
	$R_{th(j-c)} AC$	$\leq 4.40$		BTA Insulated
	$R_{th(j-c)} AC$	$\leq 3.20$		BTB Uninsulated

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