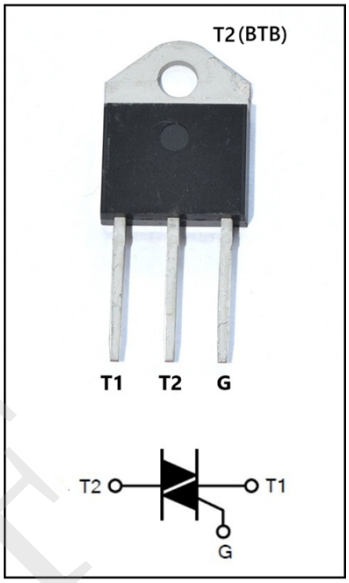
鼎德丰
DING DE FENG

TRIAC BTA41/BTB41

FEATURES

- **Glass Passivated Junctions**
- **High voltage and surge capability**
- **Low Thermal Resistance and Durability**
- **Low thermal resistance insulation ceramic for insulated BTA**
- **BTA :Insulating Voltage2500V(RMS)**



APPLICATIONS

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

ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL		VALUE		UNIT
Repetitive Peak Off-State Voltages	$V_{DRM,}$ V_{RRM}	4Q	BTA41/BTB41-600B	600	V
			BTA41/BTB41-800B	800	
			BTA41/BTB41-1000	1000	
		3Q	BTA41/BTB41-600(CW/BW)	600	
			BTA41/BTB41-800(CW/BW)	800	
			BTA41/BTB41-1000(CW/BW)	1000	
RMS on-State Current	$I_{T(RMS)}$		40		A
Non-Repetitive Peak On-State Current	I_{TSM}		400		A
I^2t for fusing	I^2t		880		A^2s
Repetitive rate of rise of on-state current after triggering	di/dt		50		A/uS
Peak gate current	I_{GM}		8		A
Average Gate Power	$P_{G(AV)}$		1		W
Operating junction temperature	T_J		-40~+125		℃
Storage Temperature	T_{STG}		-40 ~ +150		℃

ELECTRICAL CHARACTERISTICS (TJ=25°C) 4 Quadrants

PARAMETER	SYMBOL	TEST CONDITIONS		MIN	MAX B	UNITS
Peak Repetitive Forward or Reverse Blocking Current	I_{DRM} I_{RRM}	V_{AK} = Rated V_{DRM} or V_{RRM};			5	uA
Gate Trigger Current	I_{GT}	V_D=12V, R_L=33Ω	I-II-III		50	mA
			IV		100	
Gate Trigger Voltage	V_{GT}	V_D=12V, R_L=33Ω			1.3	V
Non-triggering gate voltage	V_{GD}	VD = VDRM ,Tj = 125°C		0.2		V
Peak Forward On-State Voltage	V_{TM}	IT=60A,			1.55	V
Latch Current	I_L	IG=1.2IGT	I-III-IV		80	mA
			II		100	
Holding Current	I_H	I_T=0.5A			70	mA
Critical Rate of Rise of Off-State Voltage	dV/dt	V_D=67%V_{DRM}, Gate open		500		V/μs

ELECTRICAL CHARACTERISTICS (TJ=25°C)

(3Q) Triggering in three quadran

Parameter	Symbol	Test Conditions			CW	BW	Units
Peak Repetitive Forward or Reverse Blocking Current	I_{DRM} I_{RRM}	V_{AK} = Rated V_{DRM} or V_{RRM};		MAX	5		uA
Gate Trigger Current	I_{GT}	V_D=12V, R_L=33Ω	I-II-III	MAX	35	50	mA
Gate Trigger Voltage	V_{GT}			MAX	1.3		V
Non-triggering gate voltage	V_{GD}	VD = VDRM ,Tj = 125°C		MIN	0.2		V
Peak Forward On-State Voltage	V_{TM}	IT=60A,		MAX	1.55		V
Latch Current	I_L	IG=1.2IGT	I-III	MAX	70	80	mA
			II	MAX	80	100	
Holding Current	I_H	IT=0.5A		MAX	60	70	mA
Critical Rate of Rise of Off-State Voltage	dV/dt	V_D=67%V_{DRM}, T_J=25°C, Gate open		MIN	500	1000	V/μs