BTA04-800CWLL

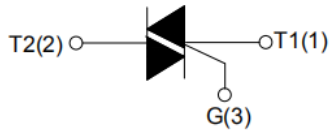
Features

- Blocking Voltage to 800 V
- Glass Passivated Surface for Reliability and Uniformity
- RoHS Compliant & HF
- High Dv/Dt Rate
- $I_{T(RMS)}$ to 4A of Triacs



TO-220F(Ins)

Pin Configuration



Absolute Maximum Ratings（Tc=25℃ Unless otherwise specified）

Parameter	Symbol	Value	Unit
Storage junction temperature range	T_{stg}	-40~150	℃
Operating junction temperature range	T_j	-40~125	℃
Repetitive peak off-state voltage (Tj=25℃)	V_{DRM}	800	V
Repetitive peak reverse voltage (Tj=25℃)	V_{RRM}	800	V
RMS on-state current	$I_{T(RMS)}$	4	A
Non repetitive surge peak on-state current (full cycle, F=50Hz)	I_{TSM}	40	A
I^2t value for fusing (tp=10ms)	I^2t	8	A^2s
Critical rate of rise of on-state current (IG=2×IGT)	dI/dt	50	A/μs
Peak gate current	I_{GM}	2	A
Average gate power dissipation	$P_{G(AV)}$	1	W
Peak gate power	P_{GM}	2.5	W

Thermal Resistance(between Junction and Case)	$R_{\theta(J-C)}$	3.3（Typ.）	℃/W

Electronics Characteristics（Tc=25℃ Unless otherwise specified）

3 Quadrants：

Parameter	Symbol	Quadrant		Value	Unit
				CW	
Gate Trigger Current (Continuous dc) @VD=12V, RL=33Ω	I_{GT}	Ⅰ-Ⅱ-Ⅲ	MAX	35	mA
Gate Trigger Voltage (Continuous dc) @VD=12V, RL=33Ω	V_{GT}			1.5	V
Gate non-trigger voltage@VD=VDRM	V_{GD}	Ⅰ-Ⅱ-Ⅲ	MIN	0.2	V
Holding Current@IT=100mA	I_H	-	MAX	60	mA
Latching Current@IG=1.2IGT	I_L	Ⅰ-Ⅲ	MAX	50	mA
		Ⅱ		60	
Critical Rate-of-Rise of Off State Voltage @VD=0.66×VDRM, Tj=125℃,Gate Open	dV/dt	-	MIN	500	V/μs
Peak Forward On-State Voltage @ITM=5.5A,tp=380μs, Tj=25℃	V_{TM}	-	MAX	1.55	V
Peak Repetitive Forward @VDRM=VRRM,Tj=25℃	I_{DRM}	-	MAX	5	μA
Reverse Blocking Current @VDRM=VRRM,Tj=125℃	I_{RRM}	-	MAX	1	mA

Note: The above typical parameters or typical characteristics are only indicative and do not make specific guarantees. If detailed values are required, additional communication and provision are required.

FIG.1: Maximum power dissipation versus RMS on-state current

P(w)

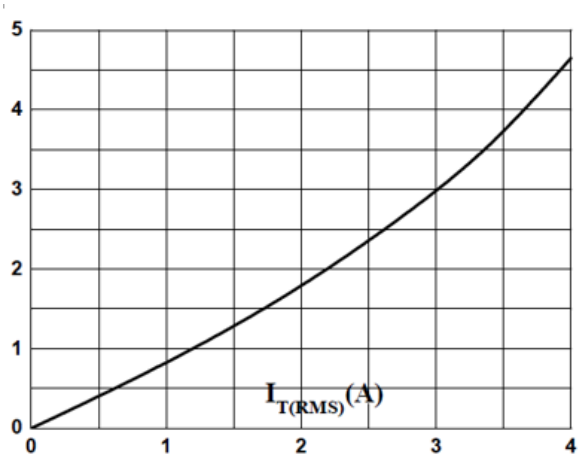


FIG.2: RMS on-state current versus case temperature

$I_{T(RMS)}$(A)

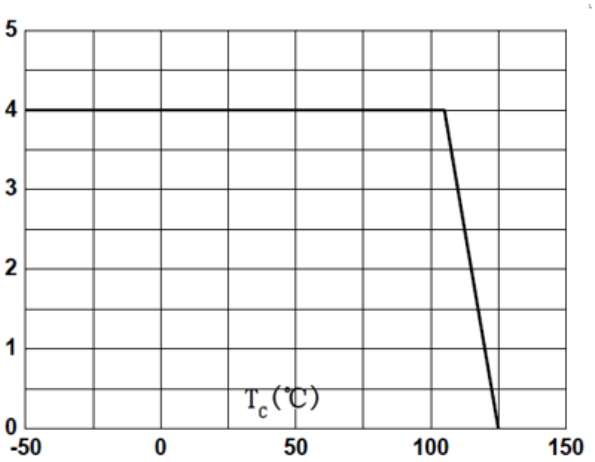


FIG.3: Surge peak on-state current versus number of cycles

$I_{TSM(A)}$

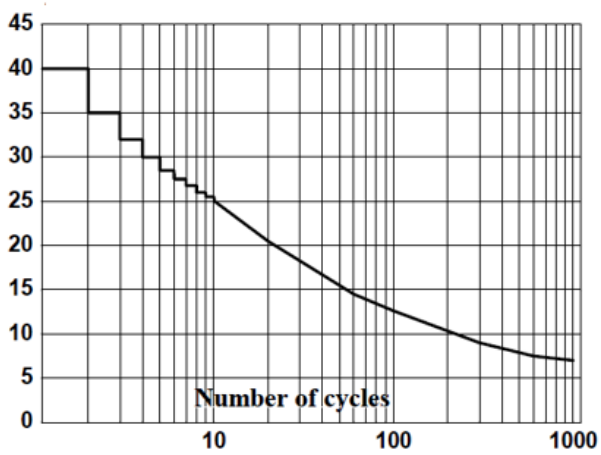


FIG.4:On-state characteristics (maximum values)

$I_{TM(A)}$

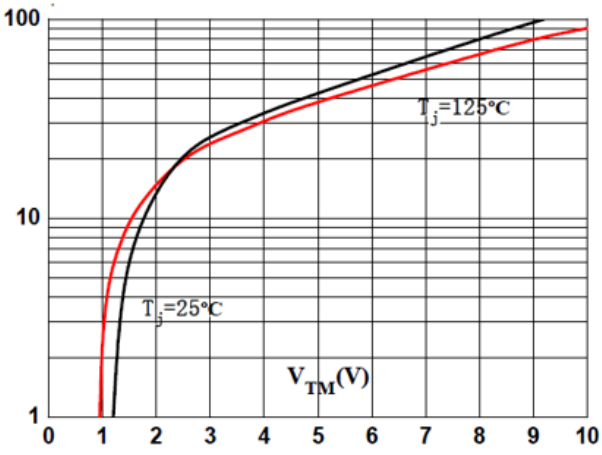


FIG.5: Non-repetitive surge peak on-state current for a sinusoidal pulse with width tp<10ms

I_{TSM}(A)

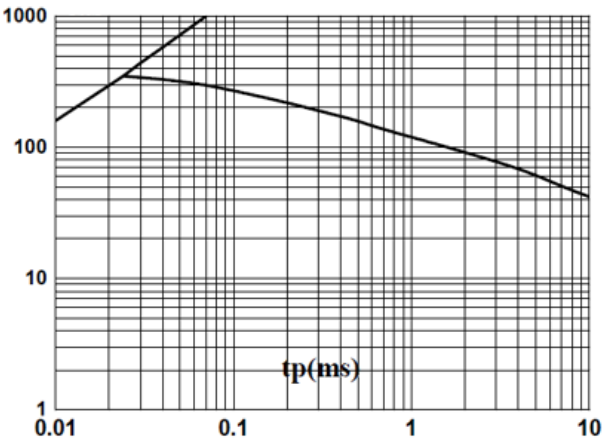
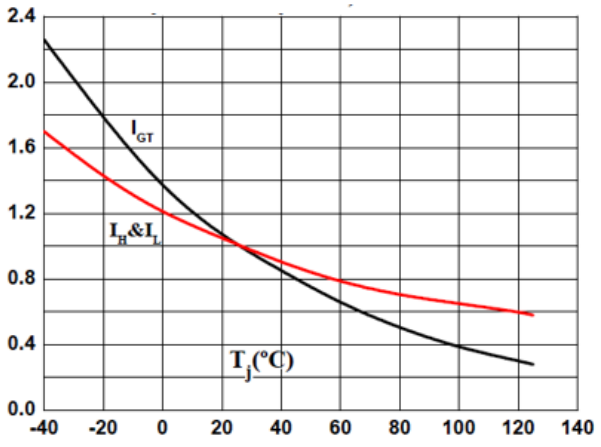


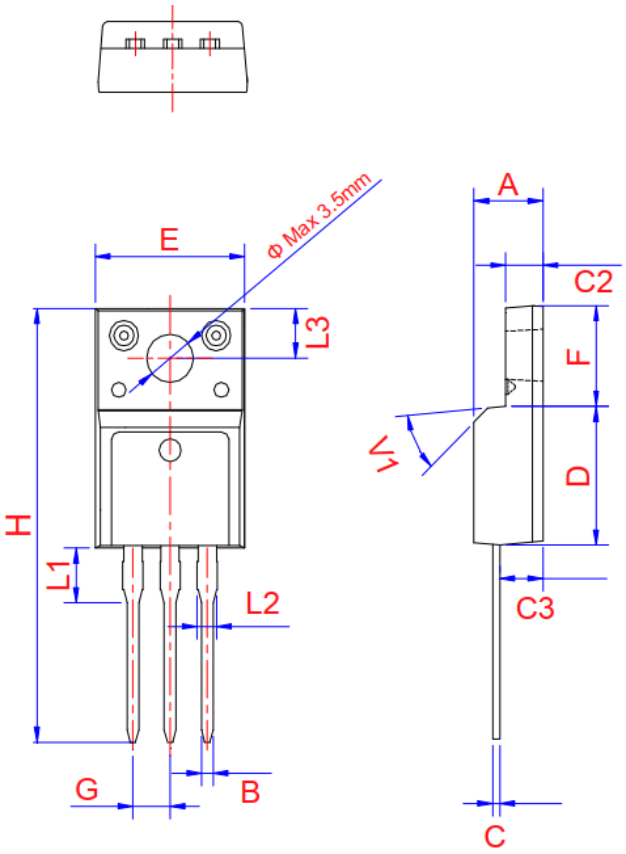
FIG.6: Relative variations of gate trigger current, holding current and latching current versus junction temperature

$I_{GT,IH,IL}(Tj)/I_{GT,IH,IL}(Tj=25℃)$

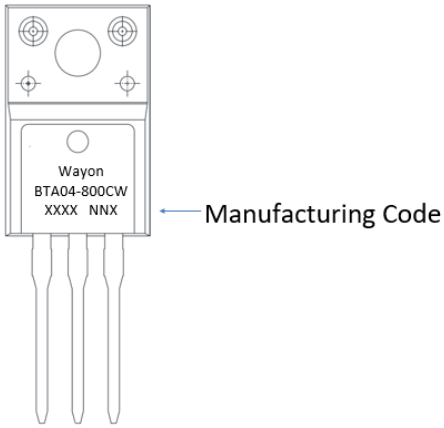


Outline Drawing

SYMBOL	MM		
	MIN	NOM	MAX
A	4.40	-	4.90
B	0.58	0.8	0.90
C	0.40	-	0.75
C2	2.34	-	2.75
C3	2.56	-	3.05
D	8.80	-	9.30
E	9.70	-	10.5
F	6.40	-	7.00
G	-	2.54	-
H	28.0	-	29.8
L1	2.80	-	3.93
L2	1.14	-	1.70
L3	2.65	3.30	3.85
V1	-	45°	-



Marking Code



Package Information

Package	Base qty.	Delivery mode
TO-220F(Ins)	50	Tube

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