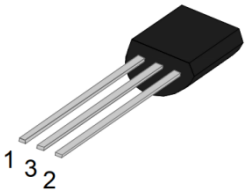
WAYON

2P4M-AL

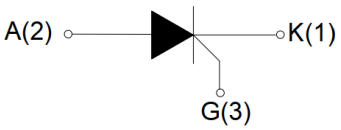
Features



TO-92

- Sensitive Gate Trigger Current
- Blocking Voltage to 600 V
- Glass Passivated Surface for Reliability and Uniformity
- RoHS Compliant & HF
- High Dv/Dt Rate
- $I_{T(RMS)}$ to 2A of Triacs

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	-40~110	℃
Repetitive peak off-state voltage (Tj=25℃)	V_{DRM}	600	V
Repetitive peak reverse voltage (Tj=25℃)	V_{RRM}	600	V
RMS on-state current	$I_{T(RMS)}$	2	A
Non repetitive surge peak on-state current (full cycle, F=50Hz)	I_{TSM}	20	A
I^2t value for fusing (tp=10ms)	I^2t	2	A^2s
Critical rate of rise of on-state current (IG=2×IGT)	dI/dt	50	A/μs
Peak gate current	I_{GM}	0.2	A
Average gate power dissipation	$P_{G(AV)}$	0.1	W
Peak gate power	P_{GM}	0.5	W

Thermal Resistance(between Junction and Case) @TO-92	$R_{\theta(J-C)}$	10（Typ.）	℃/W

Electronics Characteristics（Tc=25℃ Unless otherwise specified）

Parameter	Symbol	Min	Typ.	Max.	Unit
Gate Trigger Current (Continuous dc)@VD=12V, RL=33Ω	I_{GT}	-	50	200	uA
Gate Trigger Voltage (Continuous dc) @VD=12V, RL=33Ω	V_{GT}	-	0.6	0.8	V
Gate non-trigger voltage@VD=VDRM,Tj=110℃	V_{GD}	0.2	-	-	V
Holding Current@IT=50mA	I_H	-	-	5	mA
Latching Current@IG=1.2IGT	I_L	-	-	6	mA
Critical Rate-of-Rise of Off State Voltage@VD=0.67×VDRM, Tj=110℃,RGK=1 KΩ	dV/dt	20	-	-	V/μs
Peak Forward On-State Voltage@ITM=4A,tp=380μs, Tj=25℃	V_{TM}	-	-	1.5	V
Repetitive peak off-state current @VDRM=VRRM, RGK=1 KΩ Tj=25℃	I_{DRM}	-	-	5	μA
Reverse Blocking Current@VDRM=VRRM, RGK=1 KΩ Tj=110℃	I_{RRM}	-	-	100	μA

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

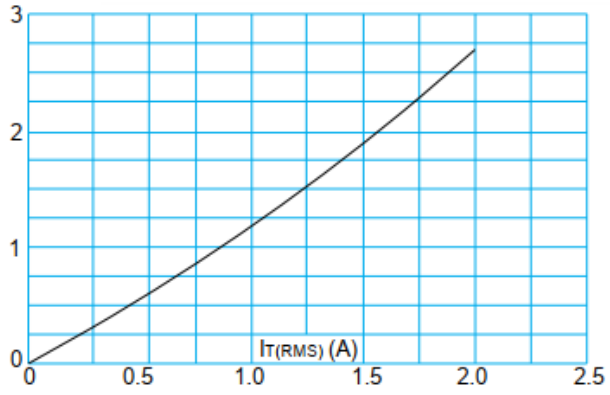


FIG.2: RMS on-state current versus case temperature in different packaging

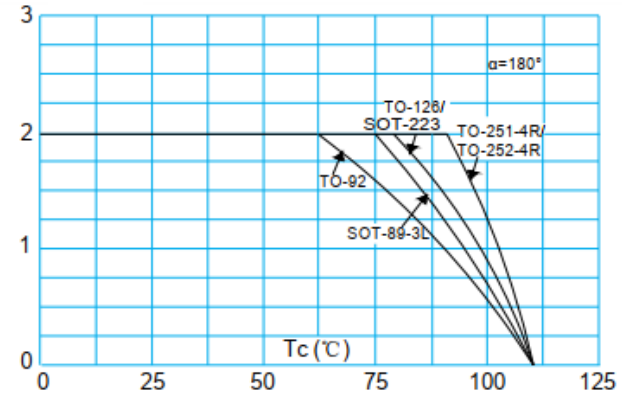


FIG.3: Surge peak on-state current versus number of cycles

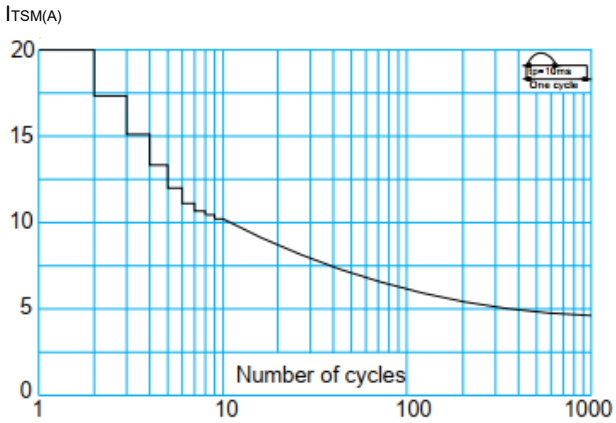


FIG.4:On-state characteristics (maximum values)

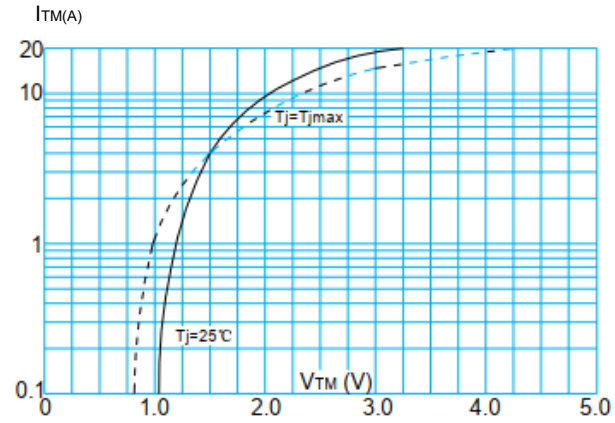


FIG.5: Non-repetitive surge peak on-state current for a sinusoidal pulse with width tp<10ms, and corresponging value of I^2t (dI/dt < 50A/μs)

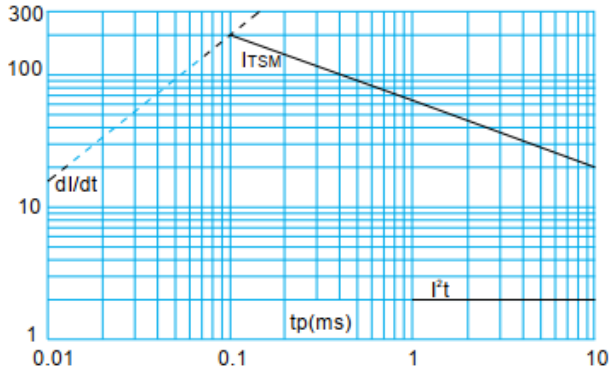
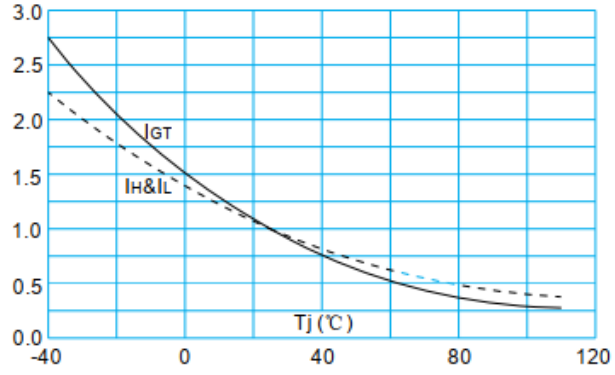
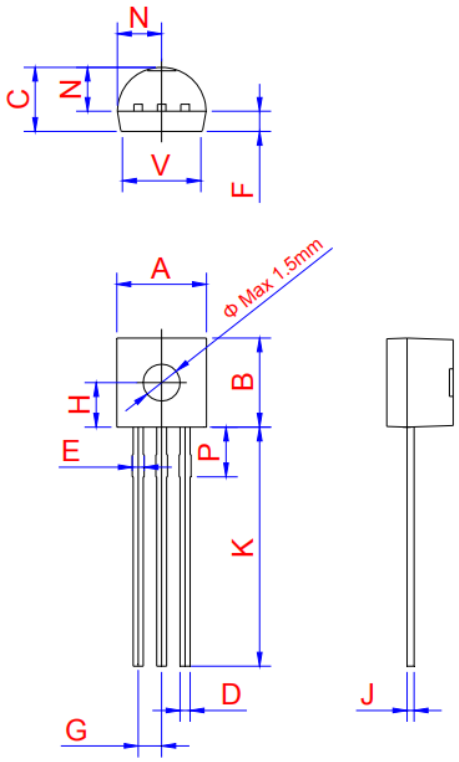


FIG.6: Relative variations of gate trigger current, holding current and latching current versus junction temperature

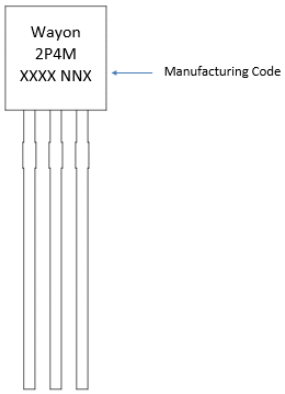


Outline Drawing- TO-92

SYMBOL	MM		
	MIN	NOM	MAX
A	4.45	4.60	5.20
B	4.32	4.60	5.33
C	3.18	3.55	4.19
D	0.254	-	0.533
E	0.30	-	0.80
F	-	1.30	-
G	-	1.27	-
H	-	2.30	-
J	0.30	0.38	0.50
K	12.70	-	15.00
N	2.04	2.30	2.66
P	1.80	-	2.30
V	-	-	4.50



Marking Code:



Package Information

Package	Base qty.	Delivery mode
TO-92	1000	Bulk Pack

Contact Information

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Product Specification Statement

The product specification aims to provide users with a reference regarding various product parameters, performance, and usage. It presents certain aspects of the product's performance in graphical form and is intended solely for users to select product and make product comparisons, enabling users to better understand and evaluate the characteristics and advantages of the product. It does not constitute any commitment, warranty, or guarantee.

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