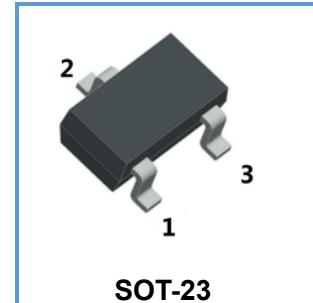
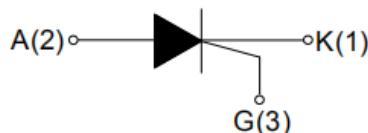


● Features

- Blocking Voltage to 600V
- High dV/dt Rate
- $I_{T(RMS)}$ to 0.8A of SCR
- $I_{T(AV)}$ to 0.5A of SCR
- RoHS Compliant & HF



● Pin Configuration



● Absolute Maximum Ratings (T_c=25°C Unless otherwise specified)

Parameter	Symbol	Value	Unit
Storage temperature range	T _{stg}	-40~150	°C
Operating junction temperature range	T _j	-40~110	°C
Repetitive peak off-state voltage (T _j =25°C)	V _{DRM}	600	V
Repetitive peak reverse voltage (T _j =25°C)	V _{RRM}	600	V
RMS on-state current	I _{T(RMS)}	0.8	A
Average on-state current (180° conduction angle)	I _{T(AV)}	0.5	A
Non repetitive surge peak on-state current (full cycle, F=50Hz)	I _{TSM}	8	A
I ² t value for fusing (tp=10ms)	I ² t	0.32	A ² s
Critical rate of rise of on-state current (I _G =2×I _{GT})	dI/dt	50	A/μs
Peak gate current	I _{GM}	0.2	A
Average gate power dissipation	P _{G(AV)}	0.1	W
Thermal Resistance(between Junction and Case)	R _{th(J-C)}	75 (Typ.)	°C/W

● **Electronics Characteristics (T_c=25°C Unless otherwise specified)**

Parameter	Symbol	Min	Typ	Max	Unit
Gate Trigger Current (Continuous dc)@V _D =12V, R _L =33Ω	I _{GT}	-	20	200	uA
Gate Trigger Voltage (Continuous dc) @V _D =12V, R _L =33Ω	V _{GT}	-	0.5	1.0	V
Gate non-trigger voltage@V _D =V _{DRM}	V _{GD}	0.2	-	-	V
Holding Current@I _T =50mA	I _H	-	-	5	mA
Latching Current@I _G =1.2I _{GT}	I _L	-	-	10	mA
Critical Rate of Rise of Off State Voltage @V _D =0.67×V _{DRM} , T _j =110°C, Gate Open	dV/dt	10	-	-	V/μs
Peak Forward On-State Voltage @I _{TM} =1A, tp=380μs, T _j =25°C	V _{TM}	-	-	1.7	V
Repetitive peak off-state current @V _{DRM} =V _{RRM} , T _j =25°C	I _{DRM}	-	-	10	μA
Reverse Blocking Current @V _{DRM} =V _{RRM} , T _j =110°C	I _{RRM}	-	-	500	uA

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

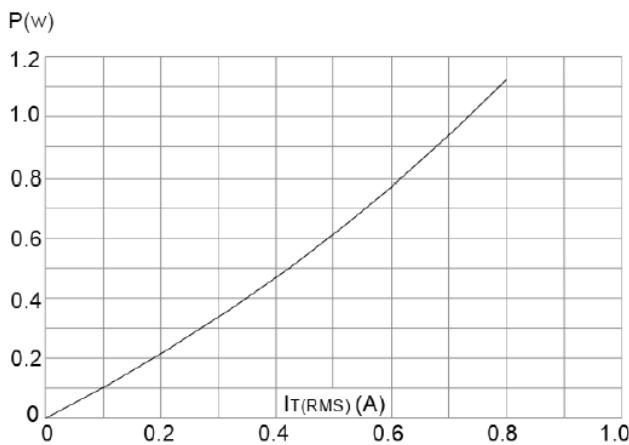


FIG.2: RMS on-state current versus case temperature

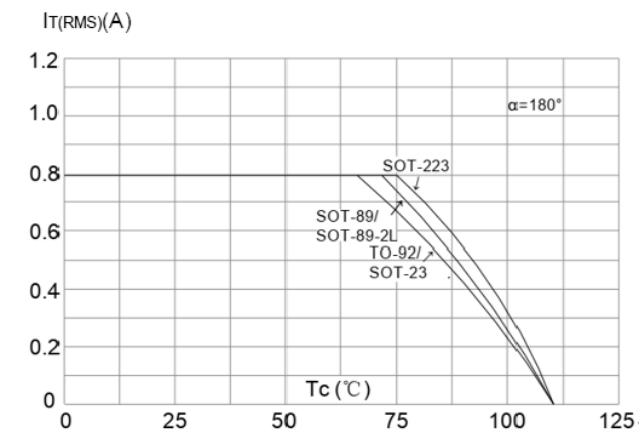


FIG.3: Surge peak on-state current versus number of cycles

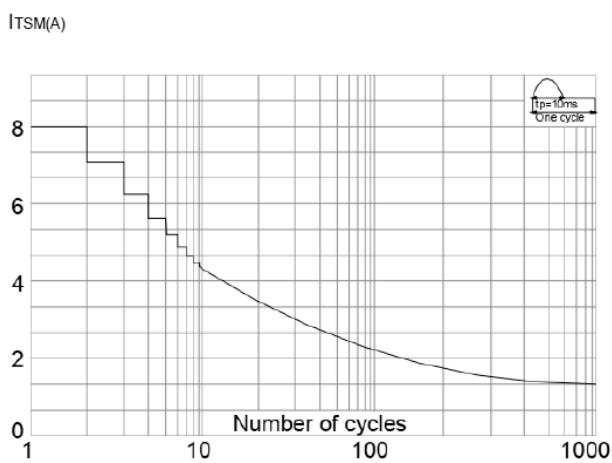


FIG.4: On-state characteristics (maximum values)

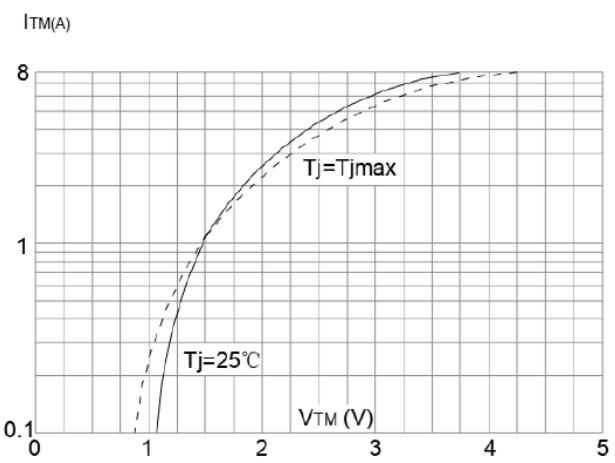


FIG.5: Non-repetitive surge peak on-state current for a sinusoidal pulse with width $t_p < 10\text{ms}$, and corresponding value of I^2t

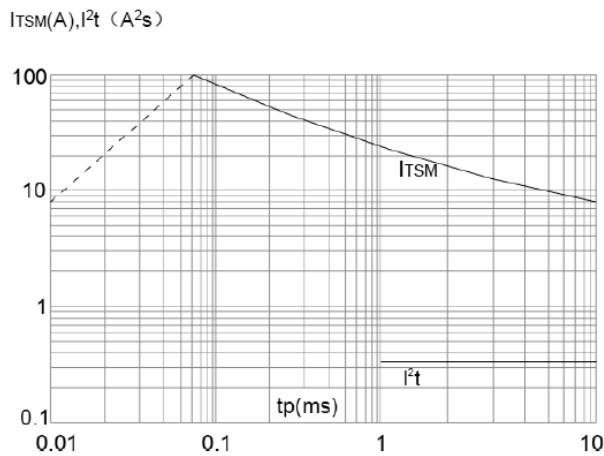
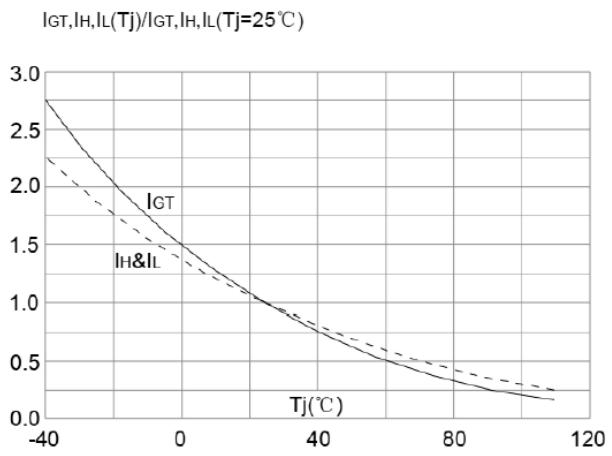
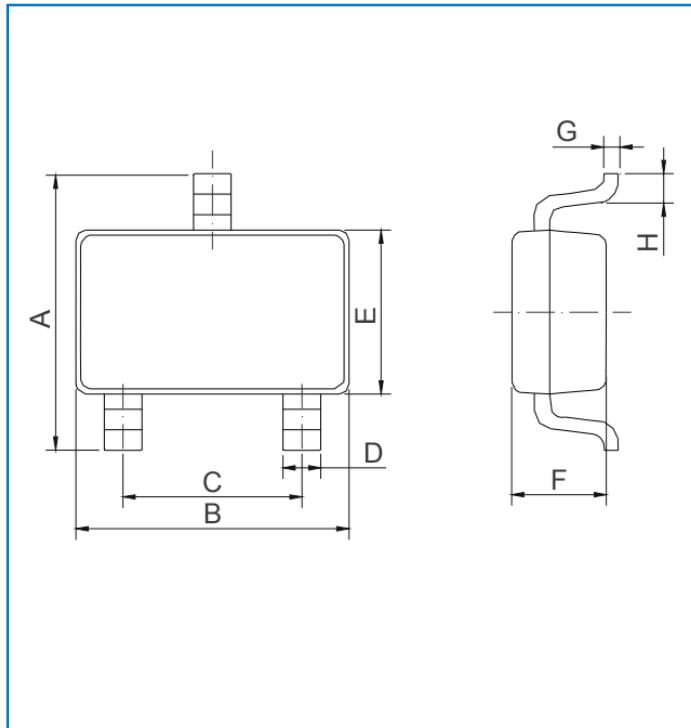


FIG.6: Relative variations of gate trigger current, holding current and latching current versus junction temperature

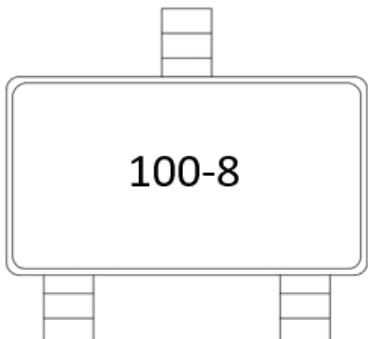


● Outline Drawing

SYMBOL	MM		
	MIN	NOM	MAX
A	2.25	2.40	2.65
B	2.80	2.90	3.95
C	1.80	1.90	2.00
D	0.30	0.40	0.55
E	1.20	1.30	1.40
F	0.90	1.00	1.15
G	0.07	0.10	0.20
H	0.25	0.40	0.55



● Marking Code:



● Package Information

Package	Base qty.	Delivery mode	MSL
SOT-23	3000	Reel	Level 3

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For additional information, please contact your local Sales Representative.

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1. 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.
2. The product parameters described in the product specification are numerical values, characteristics, and functions obtained through actual testing or theoretical calculations of the product in an independent or ideal state. Due to the complexity of product applications and variations in test conditions and equipment, there may be slight fluctuations in parameter test values. WAYON shall not guarantee that the actual performance of the product when installed in the customer's system or equipment will be entirely consistent with the product specification, especially concerning dynamic parameters. It is recommended that users consult with professionals for product selection and system design. Users should also thoroughly validate and assess whether the actual parameters and performance when installed in their respective systems or equipment meet their requirements or expectations. Additionally, users should exercise caution in verifying product compatibility issues, and WAYON assumes no responsibility for the application of the product.
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