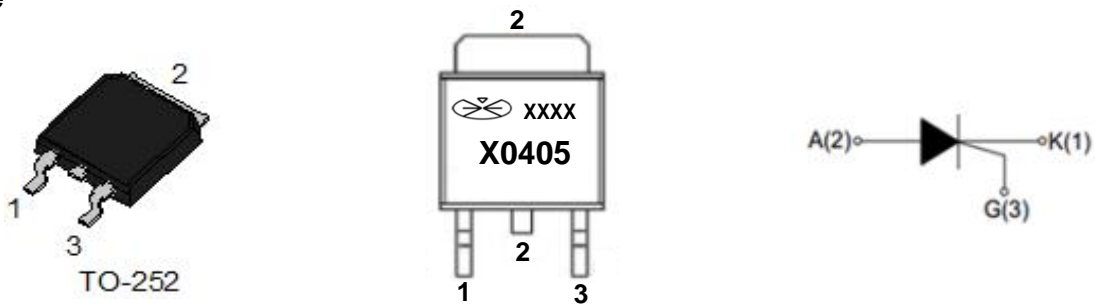




**MAIN FEATURES**

Symbol	value	unit
$I_{T(AV)}$	4	A
$V_{DRM}/V_{RRM}$	600	V
$I_{TSM}$	40	A

**Package**



**Package Marking and Ordering Information**

Product ID	PACK	Qty (pcs)
X0405	TO-252	2500

**ABSOLUTE MAXIMUM RATINGS(Ta=25°C unless otherwise noted)**

Symbol	Parameter		Value	Unit
$V_{DRM}/V_{RRM}$	Repetitive peak off-state voltage		600	V
$I_{T(RMS)}$	RMS on-state current(full sine wave)		4	A
$I_{TSM}$	Non repetitive surge peak on-state current(half sine wave)	Tc=90°C	40	A
$I_{GM}$	Peak gate current		4	A
$I^2t$	I <sup>2</sup> t for fusing	tp=10ms	16	A <sup>2</sup> S
$P_{G(AV)}$	Average gate Power Dissipation	Tj=125°C	0.5	W
$di/dt$	Repetitive rate of rise of on-state current after triggering		50	A/μs
Tj	Junction Temperature		-40 to 125	°C
Tstg	Storage Temperature		-40 to 150	°C



**ELECTEICAL CHARACTERISTICS(Ta=25°C unless otherwise specified)**

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Gate trigger current	IGT	V <sub>D</sub> =12V;R <sub>L</sub> =100Ω			200	μA
Gate trigger voltage	VGT	V <sub>D</sub> =12V;R <sub>L</sub> =100Ω			1.5	V
Non-triggering gate voltage	VGD	T <sub>j</sub> =125°C	0.2			V
Holding current	I <sub>H</sub>	I <sub>T</sub> =0.5A			0.2	mA
Critical rise rate of off-state voltage	dV/dt	V <sub>D</sub> =2/3V <sub>DRM</sub> ;T <sub>j</sub> =125°C	5			V/μs
Peak on-state voltage	V <sub>TM</sub>	I <sub>TM</sub> =8A			1.80	V
Peak forward reverse blocking current	I <sub>DRM</sub>	V <sub>D</sub> =V <sub>DRM</sub> /V <sub>R<sub>RM</sub></sub>			5	μA
	I <sub>RRM</sub>	V <sub>D</sub> =V <sub>DRM</sub> /V <sub>R<sub>RM</sub></sub> ;T <sub>j</sub> =20-125°C			1	mA

**Thermal resistance**

Parameter	Symbol	Test conditions	Value	Unit
Junction to case(AC)	R <sub>th(j-c)</sub>		1.25	°C/W

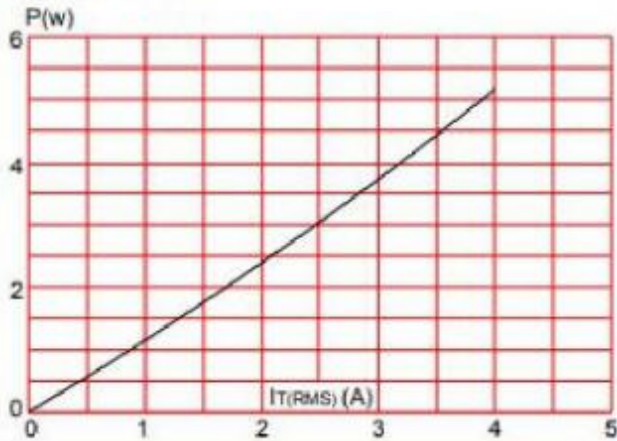
**IGT Range**

IGT	10-30	30-60	60-90

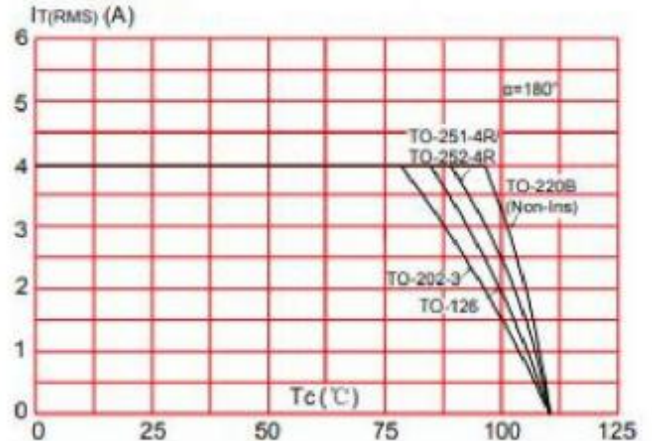


**Electrical Characteristic Curve**

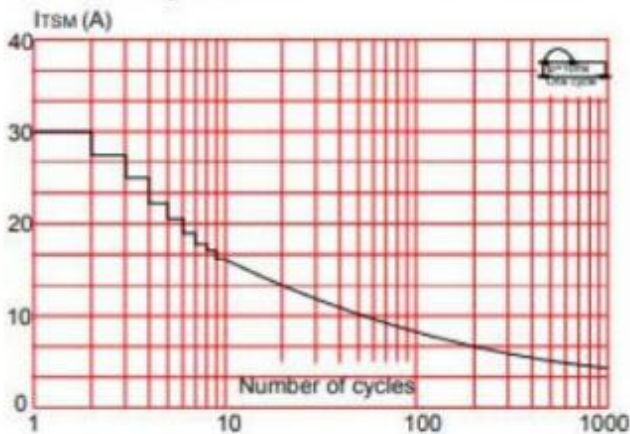
**FIG.1: Maximum power dissipation versus RMS on-state current**



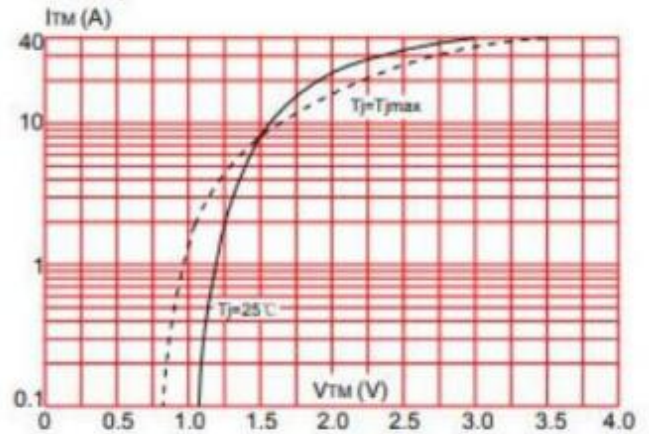
**FIG.2: RMS on-state current versus case temperature**



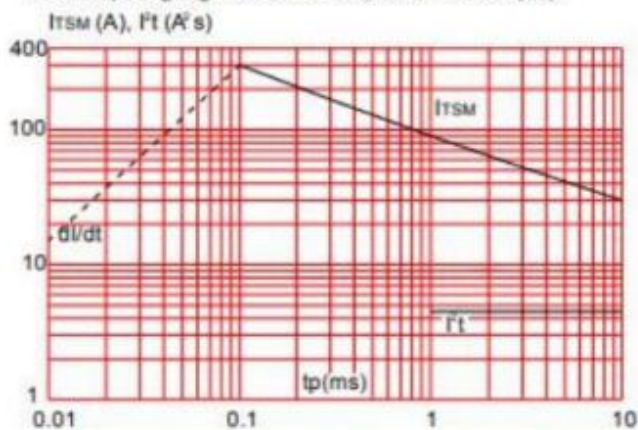
**FIG.3: Surge peak on-state current versus number of cycles**



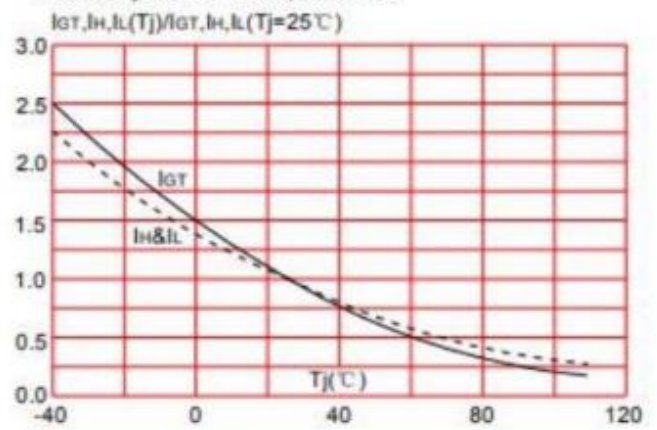
**FIG.4: On-state characteristics (maximum values)**



**FIG.5: Non-repetitive surge peak on-state current for a sinusoidal pulse with width  $t_p < 10\text{ms}$ , and corresponding value of  $I't$  ( $di/dt < 50\text{A}/\mu\text{s}$ )**

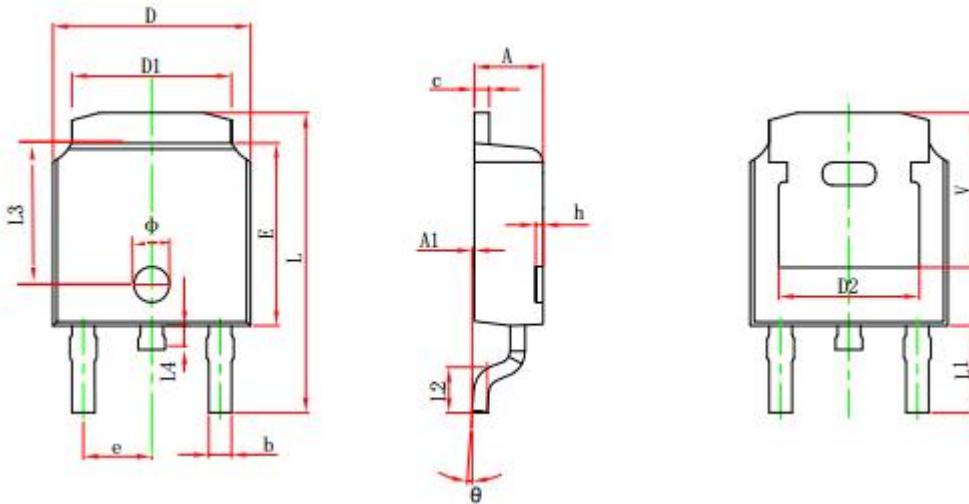


**FIG.6: Relative variations of gate trigger current, holding current and latching current versus junction temperature**



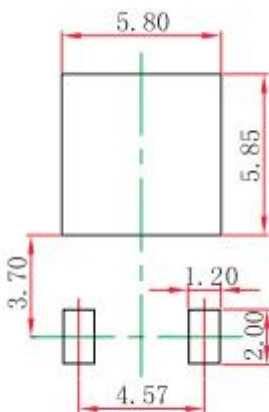


**TO-252-2L Package Outline Dimensions**



Symbol	Dimensions in Millimeters		Dimensions in Inches	
	Min.	Max.	Min.	Max.
A	2.200	2.400	0.087	0.094
A1	0.000	0.127	0.000	0.005
b	0.635	0.770	0.025	0.030
c	0.460	0.580	0.018	0.023
D	6.500	6.700	0.256	0.264
D1	5.100	5.460	0.201	0.215
D2	4.830 REF.		0.190 REF.	
E	6.000	6.200	0.236	0.244
e	2.186	2.386	0.086	0.094
L	9.712	10.312	0.382	0.406
L1	2.900 REF.		0.114 REF.	
L2	1.400	1.700	0.055	0.067
L3	4.460 REF.		0.1756 REF.	
L4	0.600	1.000	0.024	0.039
Phi	1.100	1.300	0.043	0.051
theta	0°	8°	0°	8°
h	0.000	0.300	0.000	0.012
V	5.250 REF.		0.207 REF.	

**TO-252-2L Suggested Pad Layout**



**Note:**

1. Controlling dimension: in millimeters.
2. General tolerance:  $\pm 0.05\text{mm}$ .
3. The pad layout is for reference purposes only.



## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Triacs](#) category:*

*Click to view products by [Juxing Electronic Technology](#) manufacturer:*

Other Similar products are found below :

[BT137-600-0Q](#) [2N6075A](#) [NTE5688](#) [D31410](#) [ACS102-5T1](#) [ACS102-5TA](#) [MAC97A4G](#) [Z0107MAG](#) [Z0107MARL1G](#) [Z0109MARLRPG](#)  
[BTA316-800ET,127](#) [ACTT8X-800CTNQ](#) [MCR22-6G](#) [BTA16-800B\(MS\)](#) [TYN1025RG-JSM](#) [BT138-600D](#) [BTA24-600CWRG](#) [BTA16-800CWRG](#) [BT138-600E](#) [BTA08-800CW](#) [BTB24-800CW](#) [BTA16-800CW](#) [BTA16-600CW](#) [BT169](#) [MCR100-6U](#) [FT10050-12P](#) [BT136-800E](#)  
[BT136S](#) [PCR606J](#) [JST24A-800CW](#) [JST60IS-1600BW](#) [TYN810RG-JSM](#) [BT139B-600E-JSM](#) [TYN812RG-JSM](#) [BT152-800R](#) [BTB16-800BRG-JSM](#) [BTA20-800CRG](#) [TO-220](#) [BTA16-800BRG](#) [BTW69-1200RG](#) [BT136-600E](#) [BTA12-600BRG](#) [BT139-600E](#) [BTA24-800CRG](#)  
[TO-220](#) [BTA16-800BWRG](#) [BTA26-600BWRG](#) [BTA41-600BRG](#) [BT137-600E](#) [TYN612RG-JSM](#) [BTA08-600CRG](#) [BT137-600D](#)