

TYN808		
	单向可控硅 THYRISTOR	版本号 201603-A

产品概述 GENERAL DESCRIPTION

TYN808 单向可控硅采用穿通隔离台面结构，复合玻璃钝化PN结表面保护工艺技术，dv/dt高，可靠性高，适用于控温、调光、马达控制。

TYN808 Thyristor is fabricated using separation diffusion processes ,the junction termination areas are passivated with glass. Thanks to highly dv/dt and reliability,the Triacs series is suitable for domestic lighting ,heating and motor speed controllers.

主要参数 MAIN CHARACTERISTICS

参数 Parameter	数值 Value	单位 Unit
$I_{T(RMS)}$	8	A
V_{DRM}/V_{RRM}	800	V
I_{GT}	15	mA

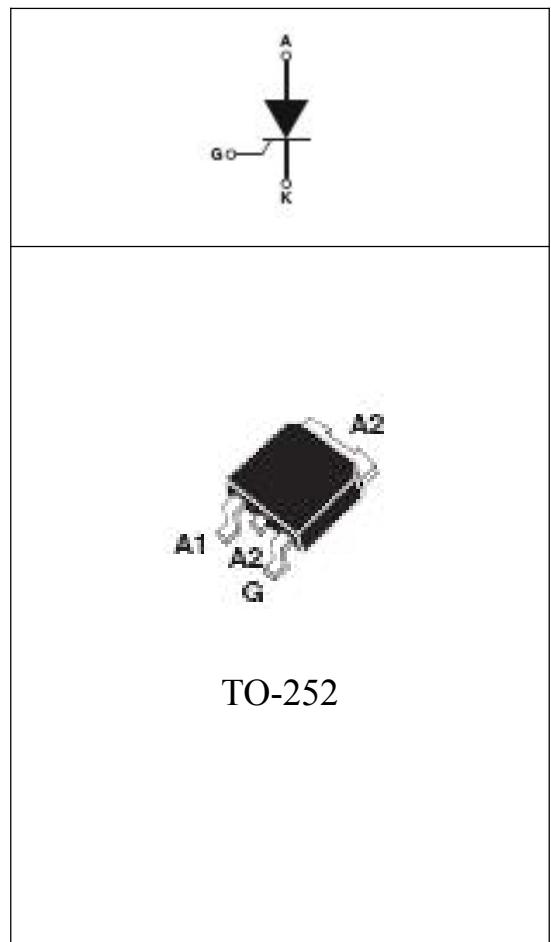
产品特性 FEATURES

- | | |
|------------|------------------------|
| ● dv/dt高 | ● Highly dv/dt |
| ● 通态压降低 | ● Low on-state voltage |
| ● Rohs环保产品 | ● Rohs Products |

应用领域 APPLICATIONS

主要应用于调光、控温、马达控制。

domestic lighting ,heating and motor speed controllers.



极限值(除非另有规定, Tj=25°C) ABSOLUTE RATINGS

(Tj=25°C, unless otherwise specified)

符号 Symbol	参数 Parameter	数值 Value	单位 Unit
I _{T(RMS)}	RMS 通态电流 RMS on-state current (full sine wave)	T _C =90°C 8	A
I _{TSM}	通态峰值浪涌电流 Non repetitive surge peak on-state current	F=50Hz, t=20ms 60	A
I ² t	I ² t 耗散值 I ² t value for fusing	T _P =10ms 36	A ² s
di/dt	通态电流上升值 Critical rate of rise of on-state current	F=120Hz, Tj=125°C 50	A/μs
I _{GM}	门极峰值电流 Peak gate current	T _P =20μs, Tj=125°C 4	A
P _{G(AV)}	平均门极耗散功率 Average gate power dissipation	Tj=125°C 1	W
T _{stg}	贮存结温范围 Storage junction temperature range	-40+150	°C
T _j	工作结温范围 Operating junction temperature range	-40+125	°C

电参数(除非另有规定, Tj=25°C) ELECTRICAL CHARACTERISTICS

(Tj=25°C, unless otherwise specified)

参数 Parameter	符号 Symbol	规范值 Value			单位 Unit	测试条件 Test Conditions
		Min	Typ	Max		
触发电流 Gate trigger current	I _{GT}	2	-	15	μA	V _D =12V, I _T =0.1A
触发电压 Gate trigger voltage	V _{GT}	-	-	1.3	V	V _D =12V, I _T =0.1A
维持电流 Holding current	I _H	-	-	40	mA	V _D =12V, I _T =0.1A
擎住电流 Latching current	I _L	-	-	50	mA	V _D =12V, I _T =0.1A
电压上升率 Rise of off- state voltage	dv/dt	150	-	-	V/μS	V _D =67%V _{DRM}
通态压降 Peak on-state voltage	V _{TM}	-	-	1.7	V	I _T =16A
断态漏电流 Peak repetitive forward blocking current	I _{DRM}	-	-	5	μA	V _{RRM} =V _{DRM} , Tj = 25°C
	I _{RRM}	-	-	2	mA	V _{RRM} =V _{DRM} , Tj = 125°C

热特性 THERMAL RESISTANCES

符号 Symbol	参数 Parameter	数值 Value	单位 Unit
Rth(j-c)	Junction to case(AC)	1.3	°C/W
Rth(j-a)	Junction to ambient	70	°C/W

特征曲线 ELECTRICAL CHARACTERISTICS (CURVES)

图1 最大耗散功率与RMS通态电流关系
Fig.1.Maximum Power Dissipation Versus on-state current

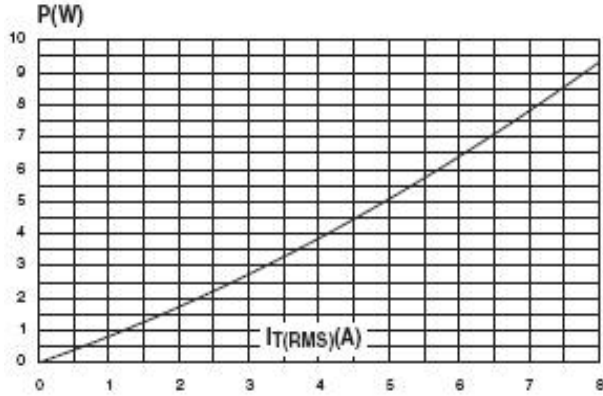


图3 通态特性
Fig.3.On-State Characteristics

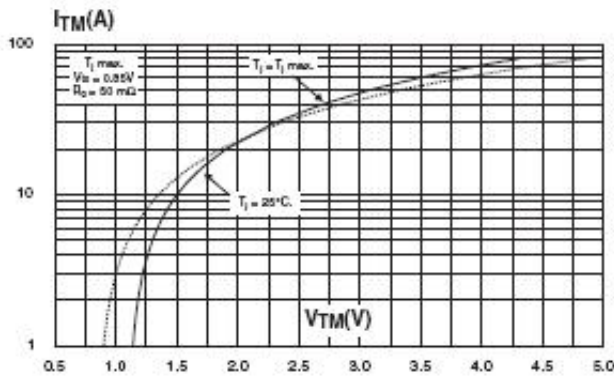


图5 I_{GT} 、 I_H 、 I_L 相对值（相对于25°C）与结温关系
Fig.5.Relative Variation Of Gate Trigger Current

, Holding Current And Latching Current Versus Junction Temperature (Typical Value)

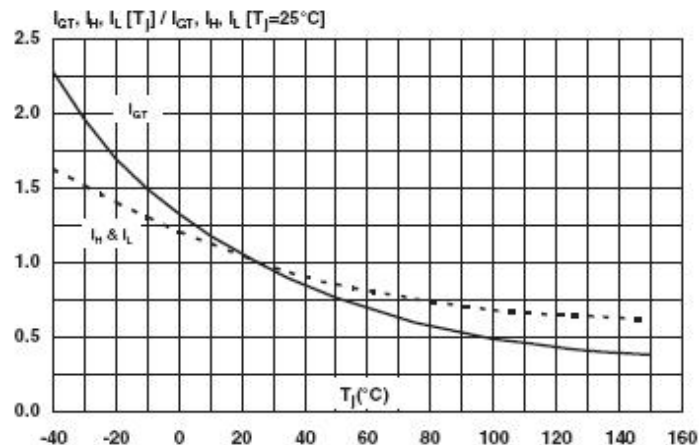


图2 RMS通态电流与Tc温度关系
Fig.2. RMS On-state Current Versus TL

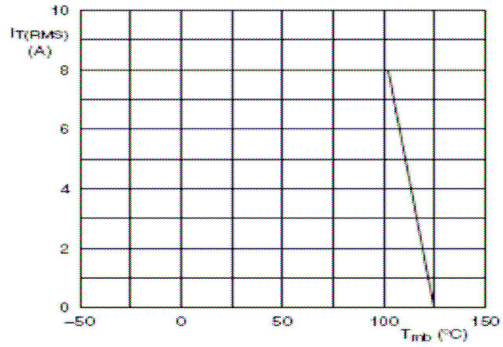
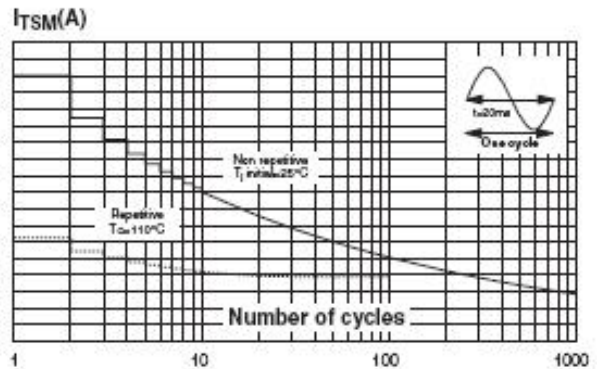
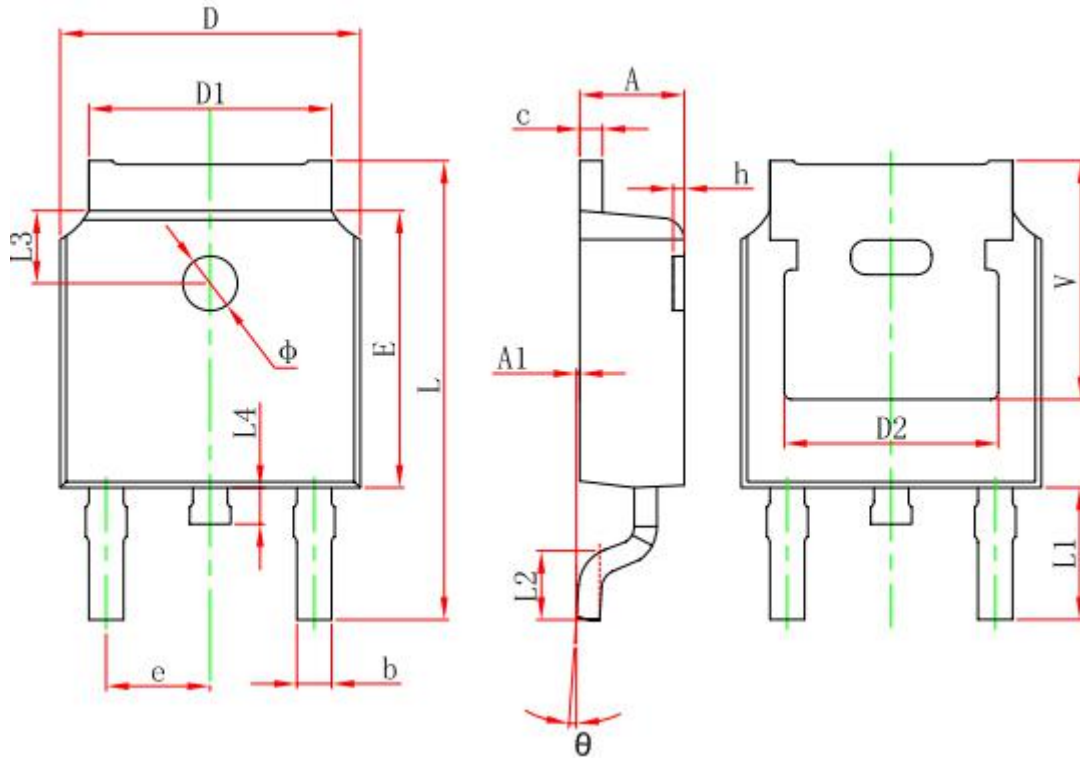


图4 通态浪涌峰值电流与周期数关系
Fig.4.Surge Peak On-state Current Versus Number Cycles



封装尺寸 PACKAGE MECHANICAL DATA

TO-252



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	0.660	0.860	0.026	0.034
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	9.800	10.400	0.386	0.409
L1	2.900 REF.		0.114 REF.	
L2	1.400	1.700	0.055	0.067
L3	1.600 REF.		0.063 REF.	
L4	0.600	1.000	0.024	0.039
φ	1.100	1.300	0.043	0.051
θ	0°	8°	0°	8°
h	0.000	0.300	0.000	0.012
V	5.350 REF.		0.211 REF.	

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