



T0825H/T0835H/T0850H

主要参数 MAIN CHARACTERISTICS

$I_{T(RMS)}$	8A
$V_{DRM} V_{RRM}$	1000V
$I_{GT}(T0825H)$	25mA
$I_{GT}(T0835H)$	35mA
$I_{GT}(T0850H)$	50mA

用途

- 交流开关
- 相位控制

APPLICATIONS

- AC switching
- Phase control

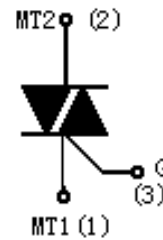
产品特性

- 玻璃钝化芯片，高可靠性和一致性
- 三象限可控硅，触发电流的一致性好
- 环保 RoHS 产品

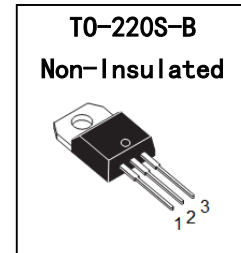
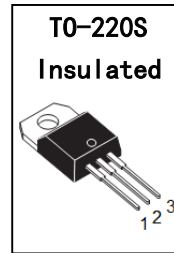
FEATURES

- Glass-passivated mesa chip for reliability and uniform
- Uniform gate trigger currents in three quadrants
- RoHS products

封装 Package



序号 Pin	引线名称 Description
1	主电极 1 MT1
2	主电极 2 MT2
3	门极 G



订货信息 ORDER MESSAGES

订货型号 Order codes				印 记 Marking	封 装 Package
有卤-条管 Halogen-Tube	无卤-条管 halogen-Free-Tube	有卤-编带 Halogen-Reel	无卤-编带 Halogen-Free-Reel		
T0825HJ-CB-B	T0825HJ-CB-BR	N/A	N/A	T0825HJ	TO-220S
T0825HB-CD-B	T0825HB -CD-BR	N/A	N/A	T0825HB	TO-220S-B
T0835HJ-CB-B	T0835HJ-CB-BR	N/A	N/A	T0835HJ	TO-220S
T0835HB-CD-B	T0835HB -CD-BR	N/A	N/A	T0835HB	TO-220S-B
T0850HJ-CB-B	T0850HJ-CB-BR	N/A	N/A	T0850HJ	TO-220S
T0850HB-CD-B	T0850HB -CD-BR	N/A	N/A	T0850HB	TO-220S-B



绝对最大额定值 ABSOLUTE RATINGS ($T_c=25^\circ\text{C}$)

项 目 Parameter	符 号 Symbol	试 验 条 件 Condition	数 值 Value	单 位 Unit
重复峰值断态电压 Repetitive peak off-state voltage	V_{DRM}		± 1000	V
通态方均根电流 On-state RMS current	$I_{\text{T(RMS)}}$	full sine wave	8	A
非重复浪涌峰值通态电流 Non-repetitive surge peak on-state current	I_{TSM}	full sine wave ,t=20ms	80	A
		full sine wave ,t=16.7ms	84	A
		I^2t	t=10ms	32
通态电流临界上升率 Repetitive rate of rise of on-state current after triggering	dl/dt	$I_{\text{TM}}=12\text{A}$, $I_{\text{G}}=0.2\text{A}$, $dl_{\text{G}}/dt=0.2\text{A}/\mu\text{s}$	100	A/ μs
峰值门极电流 Peak gate current	I_{GM}		4	A
峰值门极电压 Peak gate voltage	V_{GM}		5	V
峰值门极功率 Peak gate power	P_{GM}		5	W
平均门极功率 Average gate power	$P_{\text{G(AV)}}$	over any 20ms period	0.5	W
存储温度 Storage temperature	T_{stg}		-40~150	$^\circ\text{C}$
操作结温 Operation junction temperature	T_{VJ}		-40~125	$^\circ\text{C}$

电特性 ELECTRICAL CHARACTERISTIC ($T_c=25^\circ\text{C}$)

项 目 Parameter	符 号 Symbol	测 试 条 件 Condition	最 小 Min	典 型 Typ	最 大 Max	单 位 Unit
峰值重复断态电流 Peak Repetitive Blocking Current	I_{DRM}	$V_{\text{DM}}=V_{\text{DRM}}$, $T_j=125^\circ\text{C}$, gate open	-	-	1	mA
峰值通态电压 Peak on-state voltage	V_{TM}	$I_{\text{TM}}=11.3\text{A}$	-	1.3	1.7	V
门极开通时间 Gate controlled turn-on time	tgt	$I_{\text{TM}}=12\text{A}$, $V_{\text{DM}}=V_{\text{DRM(MAX)}}$, $I_{\text{G}}=0.1\text{A}$, $dl_{\text{G}}/dt=5\text{A}/\mu\text{S}$	-	2	-	μs

电绝缘特性 ELECTRICAL ISOLATION

项 目 Parameter	符 号 Symbol	条 件 Condition	数 值 Value	单 位 Unit
绝缘电压 Isolation voltage	V_{ISOL}	1 minute, leads to mounting tab TO-220S	2000	V



电特性 ELECTRICAL CHARACTERISTIC (T_c=25°C)

项 目 Parameter	符 号 Symbol	测 试 条 件 Condition			T0825H	T0835H	T0850H	单 位 Unit	
门极触发电流 Gate trigger current	I _{GT}	V _{DM} =12V R _L =100Ω	I - II - III	MAX	25	35	50	mA	
门极触发电压 Gate trigger voltage	V _{GT}		ALL	MAX	1.5	1.5	1.5	V	
维持电流 Holding current	I _H	V _{DM} =12V, I _{GT} =0.1A			MAX	50	50	50	mA
擎住电流 Latching current	I _L	V _{DM} =12V I _{GT} =0.1A	I - III	MAX	50	50	50	mA	
			II	MAX	70	75	75	mA	
断态临界电压上升率 Rise of off- state voltage	dV/dt	V _{DM} =67% V _{DRM(MAX)} , T _j =125°C, gate open			MAX	500	1000	1000	V/μs

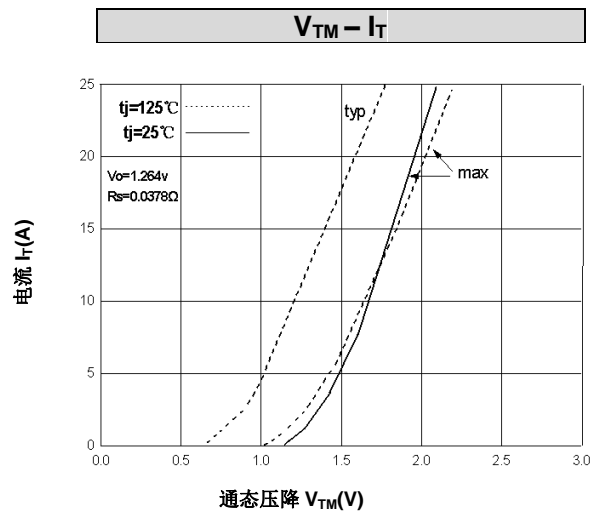
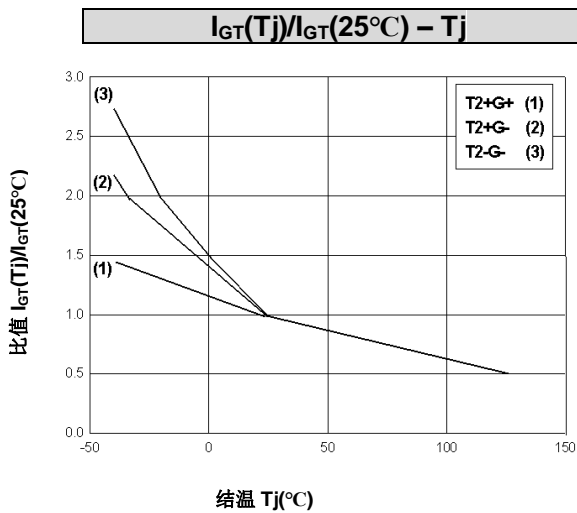
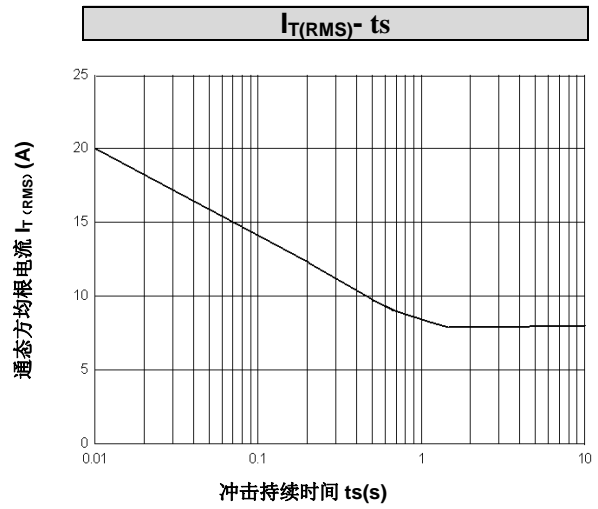
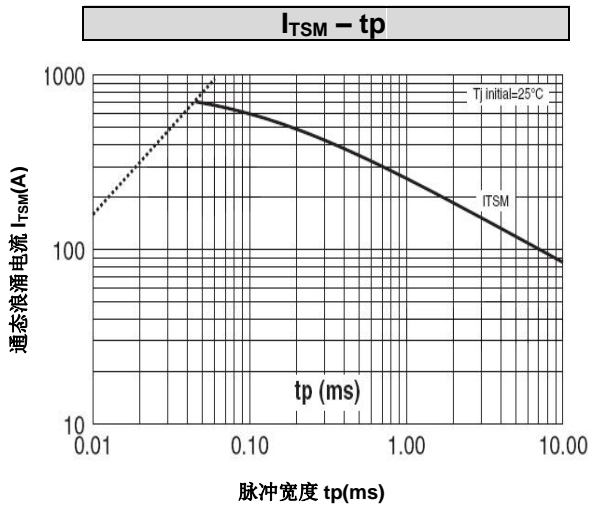
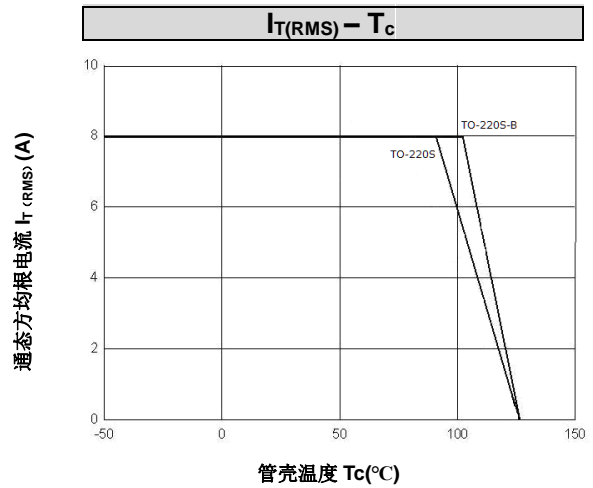
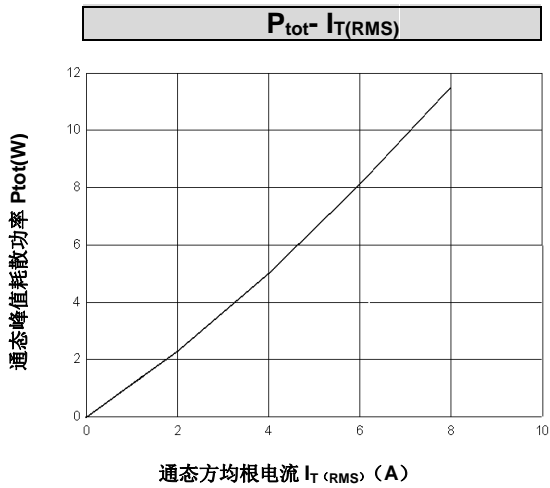
热特性 THERMAL CHARACTERISTIC

项 目 Parameter	符 号 Symbol	条 件 Condition	最小 Min	典型 Typ	最大 Max	单 位 Unit
结到管壳的热阻 Thermal resistance junction to case	R _{th(j-c)}	full cycle(TO-220S)			2.8	°C/W
		full cycle(TO-220S-B)			1.9	°C/W





征曲线 ELECTRICAL CHARACTERISTICS (curves)

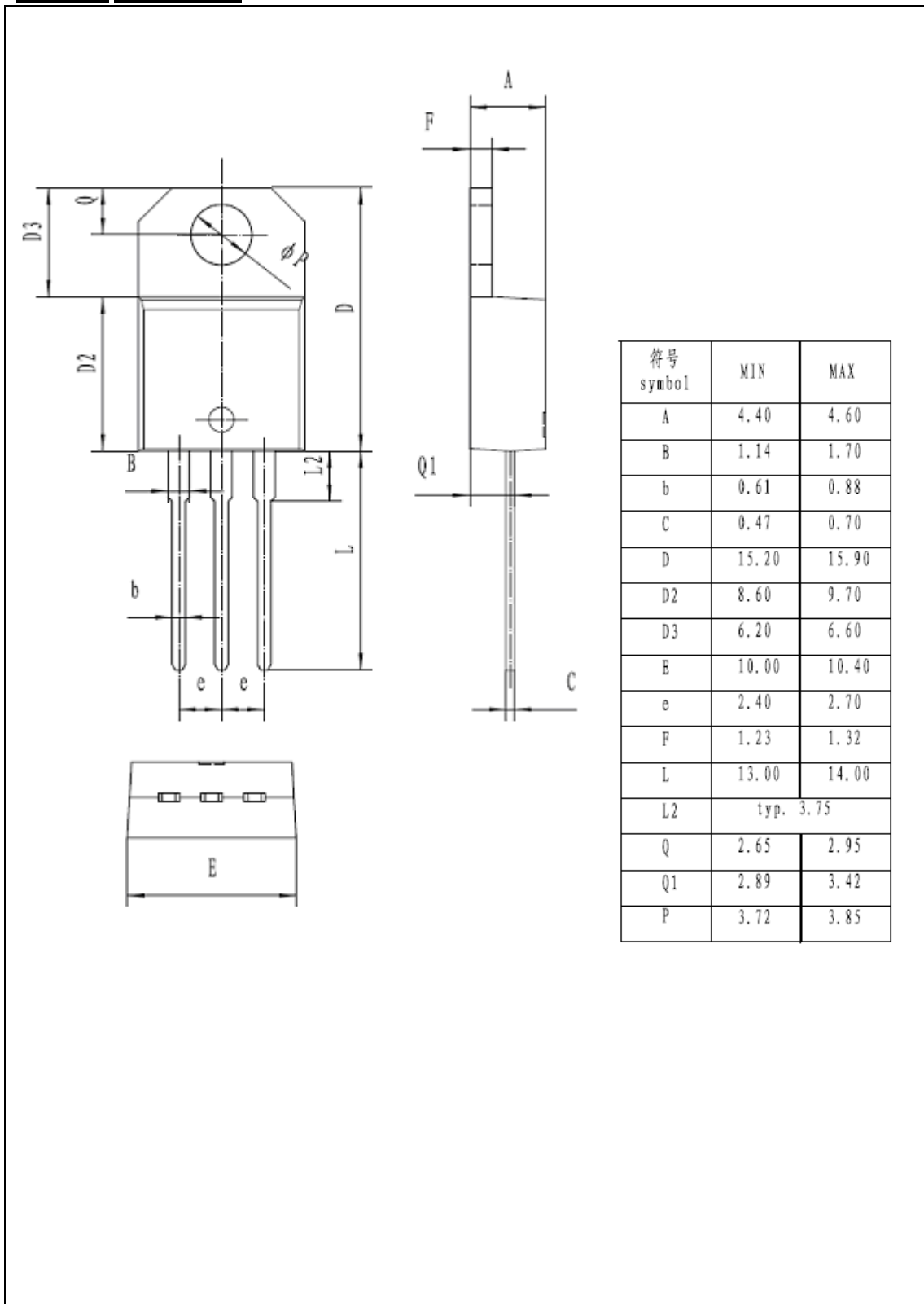




外形尺寸 PACKAGE MECHANICAL DATA

TO-220S TO-220S-B

单位 Unit : mm



**注意事项**

1. 吉林华微电子股份有限公司的产品销售分为直销和销售代理，无论哪种方式，订货时请与公司核实。
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3. 在电路设计时请不要超过器件的绝对最大额定值，否则会影响整机的可靠性。
4. 本说明书如有版本变更不另外告知

NOTE

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2. We strongly recommend customers check carefully on the trademark when buying our product, if there is any question, please don't be hesitate to contact us.
3. Please do not exceed the absolute maximum ratings of the device when circuit designing.
4. Jilin Sino-microelectronics co., Ltd reserves the right to make changes in this specification sheet and is subject to change without prior notice.

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