



T1225H/T1235H/T1250H

主要参数 MAIN CHARACTERISTICS

$I_{T(RMS)}$	12A
$V_{DRM} V_{RRM}$	1000V
$I_{GT}(T1225H)$	25mA
$I_{GT}(T1235H)$	35mA
$I_{GT}(T1250H)$	50mA

用途

- 交流开关
- 相位控制

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
- 环保 RoHS 产品

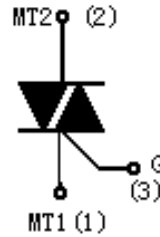
APPLICATIONS

- AC switching
- Phase control

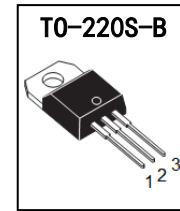
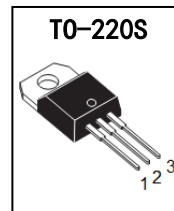
FEATURES

- 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	无卤-条管	有卤-编带	无卤-编带		
Halogen-Tube	halogen-Free-Tube	Halogen-Reel	Halogen-Free-Reel		
T1225HJ-CB-B	T1225HJ-CB-BR	N/A	N/A	T1225HJ	TO-220S
T1225HB-CD-B	T1225HB-CD-BR	N/A	N/A	T1225HB	TO-220S-B
T1235HJ-CB-B	T1235HJ-CB-BR	N/A	N/A	T1235HJ	TO-220S
T1235HB-CD-B	T1235HB-CD-BR	N/A	N/A	T1235HB	TO-220S-B
T1250HJ-CB-B	T1250HJ-CB-BR	N/A	N/A	T1250HJ	TO-220S
T1250HB-CD-B	T1250HB-CD-BR	N/A	N/A	T1250HB	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	12	A
非重复浪涌峰值通态电流 Non-repetitive surge peak on-state current	I_{TSM}	full sine wave , $t=20\text{ms}$	120	A
		full sine wave , $t=16.7\text{ms}$	126	A
	I^2t	$t=10\text{ms}$	72	A^2s
通态电流临界上升率 Repetitive rate of rise of on-state current after triggering	di/dt	$I_{\text{TM}}=20\text{A}$, $I_{\text{G}}=0.2\text{A}$, $di_{\text{G}}/dt=0.2\text{A}/\mu\text{s}$	100	$\text{A}/\mu\text{s}$
峰值门极电流 Peak gate current	I_{GM}		2	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}	$V_{\text{DM}}=V_{\text{DRM}}$, $T_{\text{j}}=125^\circ\text{C}$, gate open		-	1.5	mA
峰值通态电压 Peak on-state voltage	V_{TM}	$I_{\text{TM}}=17\text{A}$	-	1.3	1.7	V
门极开通时间 Gate controlled turn-on time	t_{gt}	$I_{\text{TM}}=16\text{A}$, $V_{\text{DM}}=V_{\text{DRM(MAX)}}$, $I_{\text{G}}=0.1\text{A}$, $di_{\text{G}}/dt=5\text{A}/\mu\text{s}$	-	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			T1225H	T1235H	T1250H	单 位 Unit
门极触发电流 Gate trigger current	I _{GT}	V _{DM} =12V,	I - II - III	MAX	25	35	50	mA
门极触发电压 Gate trigger voltage	V _{GT}	R _L =100Ω	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	70	70	70	mA
			II	MAX	80	80	80	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

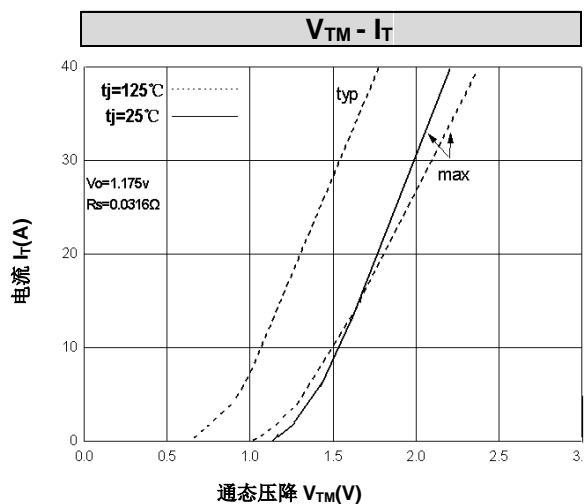
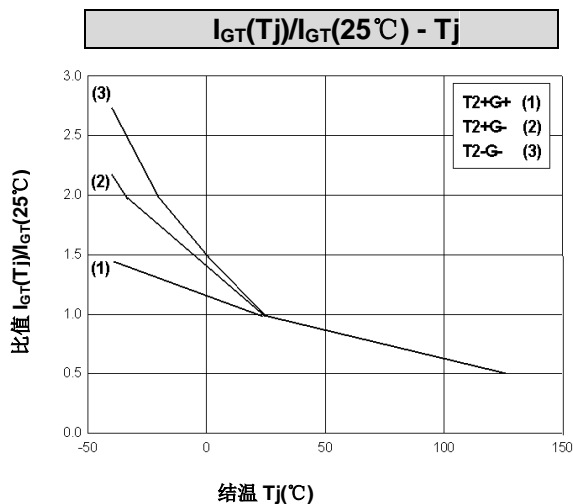
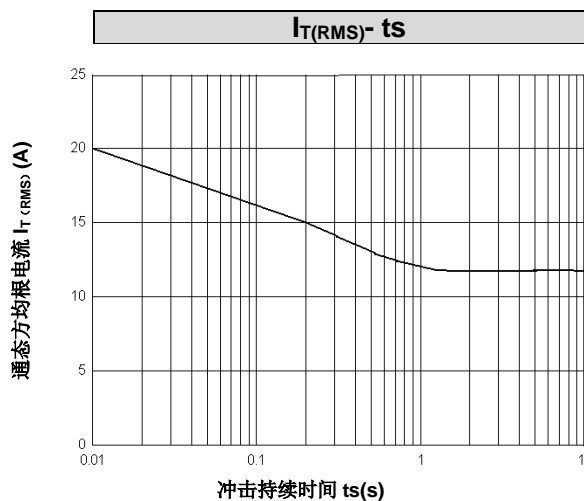
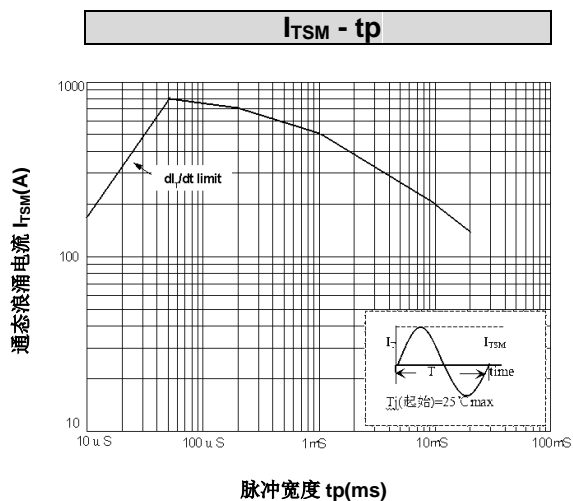
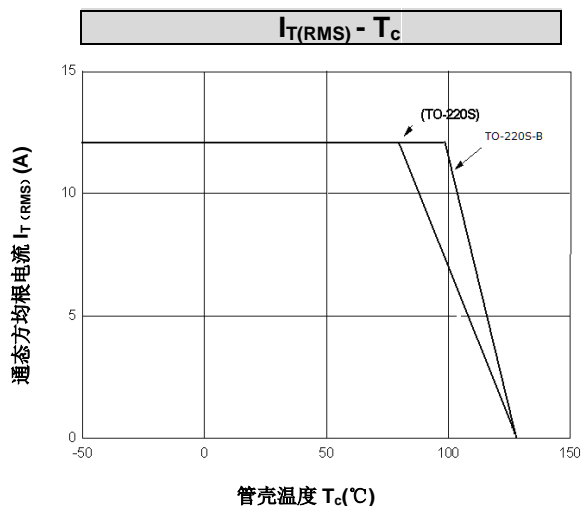
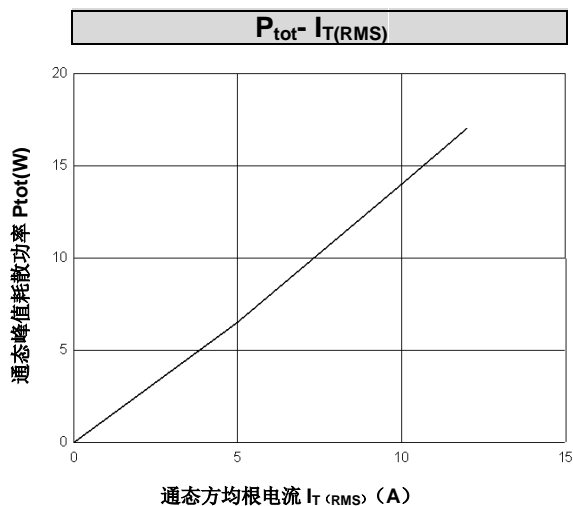
热特性 THERMAL CHARACTERISTIC

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)			2.4	°C/W
		full cycle(TO-220S-B)			1.6	°C/W





特征曲线 ELECTRICAL CHARACTERISTICS (curves)

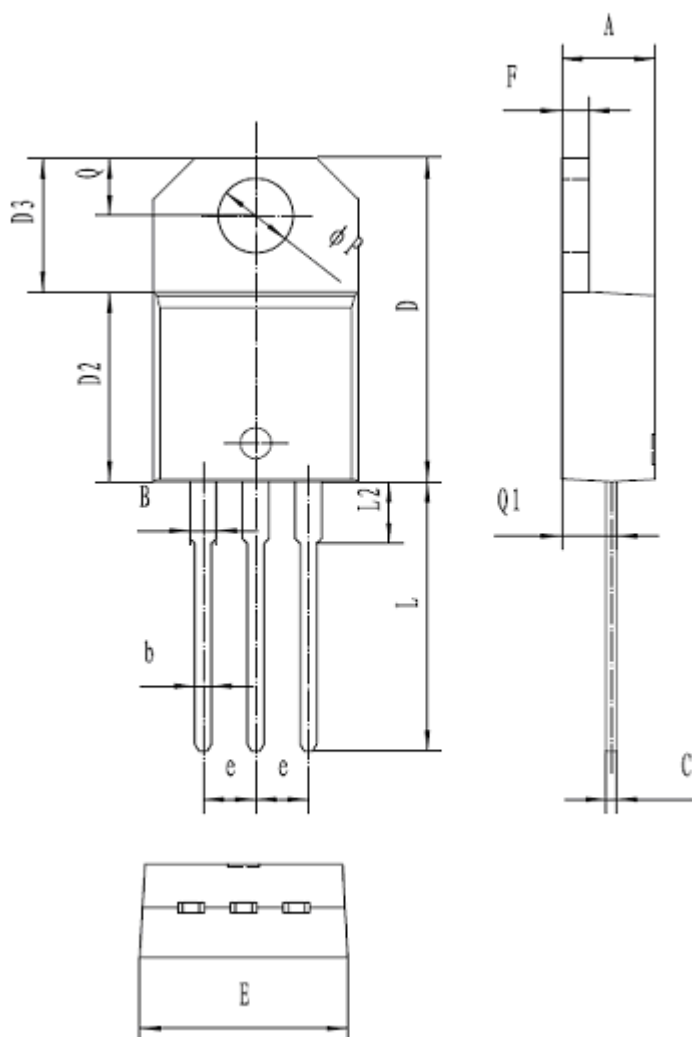




外形尺寸 PACKAGE MECHANICAL DATA

TO-220S TO-220S-B

单位 Unit : mm



符号 symbol	MIN	MAX
A	4.40	4.60
B	1.14	1.70
b	0.61	0.88
C	0.47	0.70
D	15.20	15.90
D2	8.60	9.70
D3	6.20	6.60
E	10.00	10.40
e	2.40	2.70
F	1.23	1.32
L	13.00	14.00
L2	typ. 3.75	
Q	2.65	2.95
Q1	2.89	3.42
P	3.72	3.85





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4. 本说明书如有版本变更不另外告知

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3. Please do not exceed the absolute maximum ratings of the device when circuit designing.
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