



T1635NZP

主要参数 MAIN CHARACTERISTICS

$I_{T(RMS)}$	16A
V_{DRM}	800V
I_{GT}	20mA

用途

- 交流开关
- 相位控制

APPLICATIONS

- AC switching
- Phase control

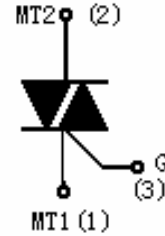
产品特性

- 平面工艺芯片，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

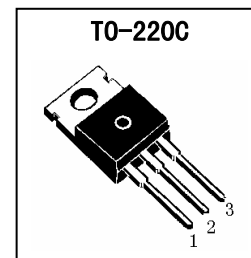
FEATURES

- The planar process 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	T1635NZP	TO-220C
T1635NZP-C-B	T1635NZP-C-BR	N/A	N/A		



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}		± 800	V
通态方均根电流 On-state RMS current	$I_{\text{T(RMS)}}$	full sine wave,	16	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	140	A
		full sine wave ,t=16.7ms	150	A
		I^2t	t=10ms	98
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}		-40~150	$^\circ\text{C}$



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}	$V_{\text{DM}}=V_{\text{DRM}}$, $T_j=150^\circ\text{C}$, gate open		--	1.0	mA
峰值通态电压 Peak on-state voltage	V_{TM}	$I_{\text{TM}}=18\text{A}$, $T_j=25^\circ\text{C}$,		--	1.5	V
门极触发电流 Gate trigger current	I_{GT}	$V_{\text{DM}}=12\text{V}$, $R_L=100\ \Omega$, MT1(-),MT2(+),G(+)		--	20	mA
		MT1(-),MT2(+),G(-)		--	20	mA
		MT1(+),MT2(-),G(-)		--	20	mA
门极触发电压 Gate trigger voltage	V_{GT}	$V_{\text{DM}}=12\text{V}$, $R_L=100\ \Omega$, MT1(-),MT2(+),G(+)		0.7	1.0	V
		MT1(-),MT2(+),G(-)		0.7	1.5	V
		MT1(+),MT2(-),G(-)		0.7	1.5	V
维持电流 Holding current	I_{H}	$V_{\text{DM}}=12\text{V}$, $I_{\text{GT}}=0.1\text{A}$		--	20	mA
擎住电流 Latching current	I_{L}	$V_{\text{DM}}=12\text{V}$, $I_{\text{GT}}=0.1\text{A}$, MT1(-),MT2(+),G(+)		-	30	mA
		MT1(-),MT2(+),G(-)		-	30	mA
		MT1(+),MT2(-),G(-)		-	30	mA
断态临界电压上升率 Rise of off- state voltage	dV/dt	$V_{\text{DM}}=67\% V_{\text{DRM(MAX)}}$, $T_j=150^\circ\text{C}$, gate open	1000	-	-	V/ μs
门极开通时间 Gate controlled turn-on time	tgt	$I_{\text{TM}}=20\text{A}$, $V_{\text{DM}}=V_{\text{DRM(MAX)}}$, $I_{\text{G}}=0.1\text{A}$, $dI_{\text{G}}/dt=5\text{A}/\mu\text{S}$	-	2	-	μs

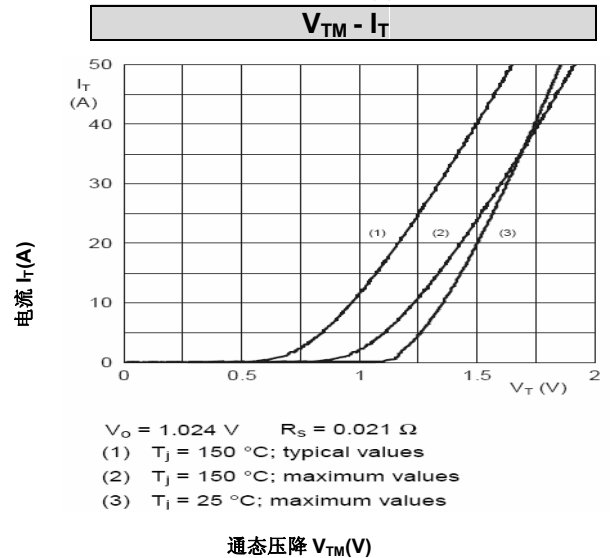
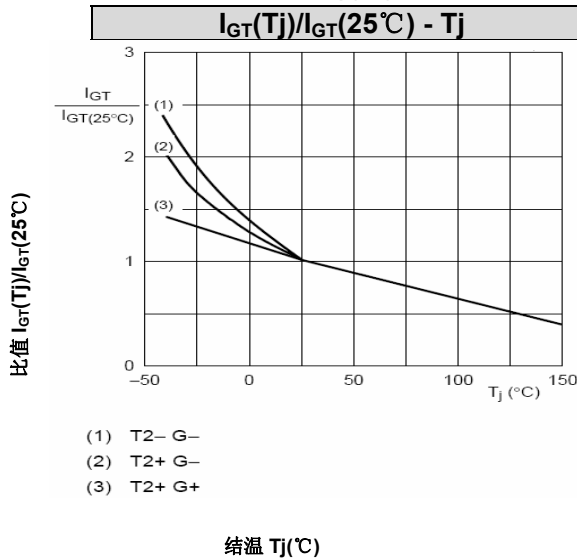
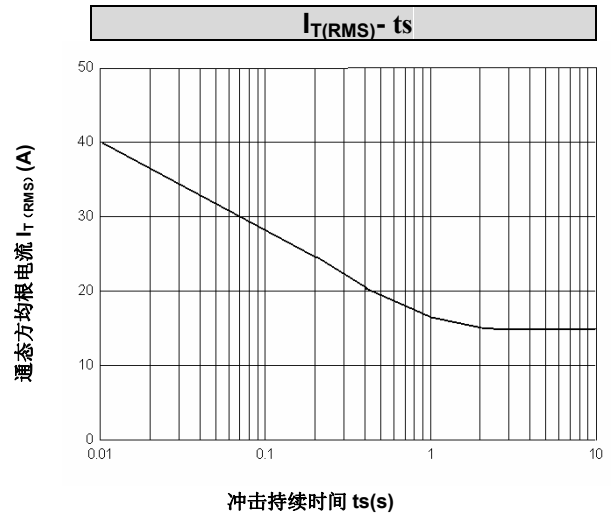
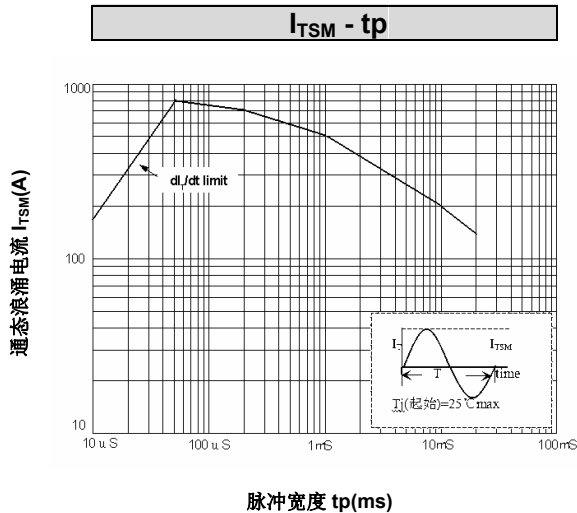
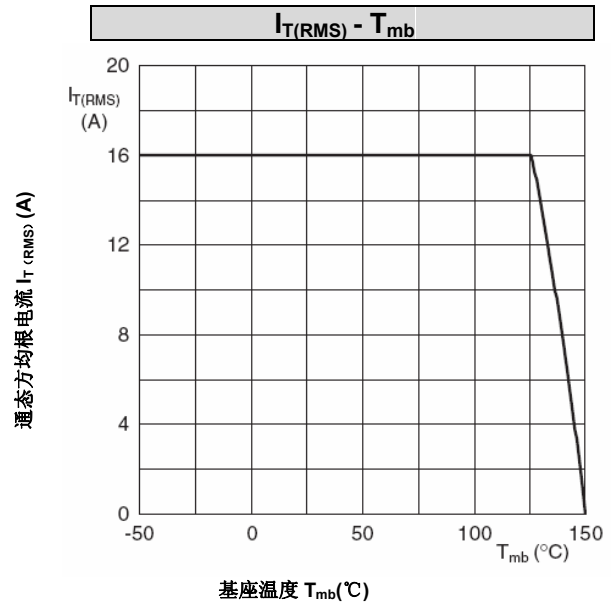
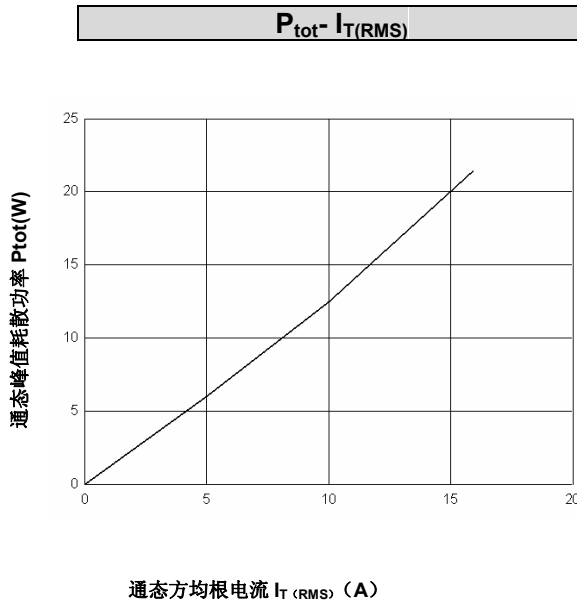
热特性 THERMAL CHARACTERISTIC

项 目 Parameter	符 号 Symbol	条 件 Condition	最小 Min	典型 Typ	最大 Max	单位 Unit
结到安装面的热阻 Thermal resistance junction to mounting base	$R_{\text{th(j-c)}}$	full cycle(TO-220C)			1.2	$^\circ\text{C}/\text{W}$





特征曲线 ELECTRICAL CHARACTERISTICS (curves)

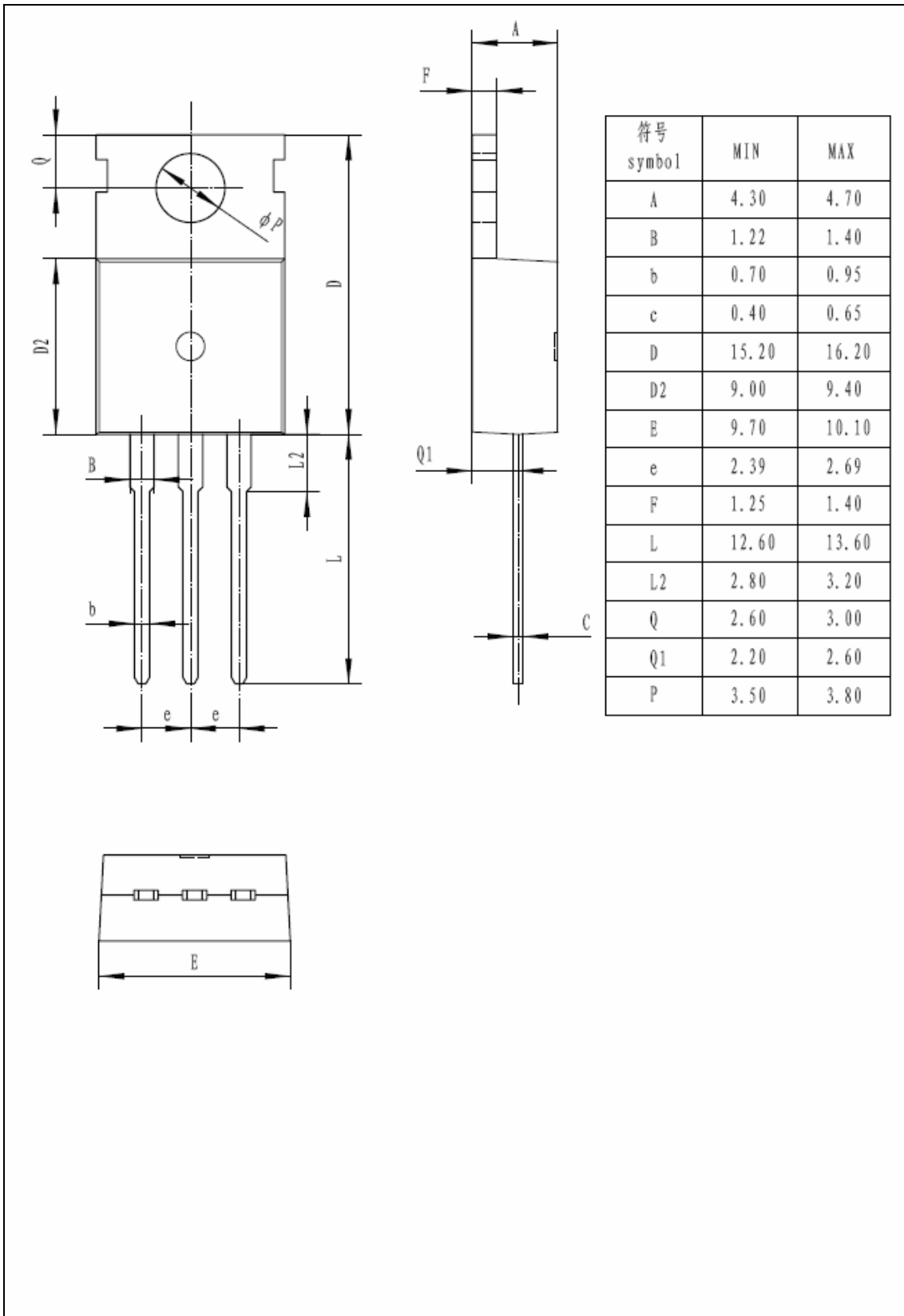




外形尺寸 PACKAGE MECHANICAL DATA

TO-220C

单位 Unit : mm



**注意事项**

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