



T0835NF1P

主要参数 MAIN CHARACTERISTICS

$I_{T(RMS)}$	8A	
V_{DRM}	800V	
I_{GT}	35mA	

用途

APPLICATIONS

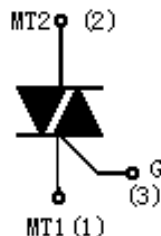
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| ● 交流开关 | ● AC switching |
| ● 相位控制 | ● Phase control |

产品特性

FEATURES

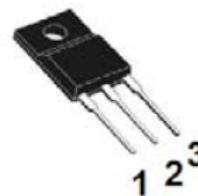
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|--------------------|---|
| ● 平面工艺芯片高可靠性和一致性 | ● The planar process chip for reliability and uniform |
| ● 三象限可控硅, 触发电流的一致性 | ● Uniform gate trigger currents in three quadrants |
| ● 环保 RoHS 产品 | ● RoHS products |

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

T0-220MF-K1



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		
T0835NF1P-F1-B	N/A	N/A	N/A	T0835NF1P	TO-220MF-K1



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	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	36	A^2s
通态电流临界上升率 Repetitive rate of rise of on-state current after triggering	di/dt	$I_{\text{TM}}=12\text{A}$, $I_{\text{G}}=0.2\text{A}$, $di_{\text{G}}/dt=0.2\text{A}/\mu\text{s}$	50	$\text{A}/\mu\text{s}$
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	1	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}	$I_{\text{TM}}=11.3\text{A}$	-	1.3	1.55	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(+)	2	-	35	mA
		MT1(-),MT2(+),G(-)	2	-	35	mA
		MT1(+),MT2(-),G(-)	2	-	35	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}	$V_{\text{DM}}=12\text{V}$, $I_{\text{GT}}=0.1\text{A}$	-	-	50	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(+)	-	-	50	mA
		MT1(-),MT2(+),G(-)	-	-	50	mA
		MT1(+),MT2(-),G(-)	-	-	50	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	$I_{\text{TM}}=6\text{A}$, $V_{\text{DM}}=V_{\text{DRM(MAX)}}$, $I_{\text{G}}=0.1\text{A}$, $dI_{\text{G}}/dt=5\text{A}/\mu\text{s}$	-	2	-	μs

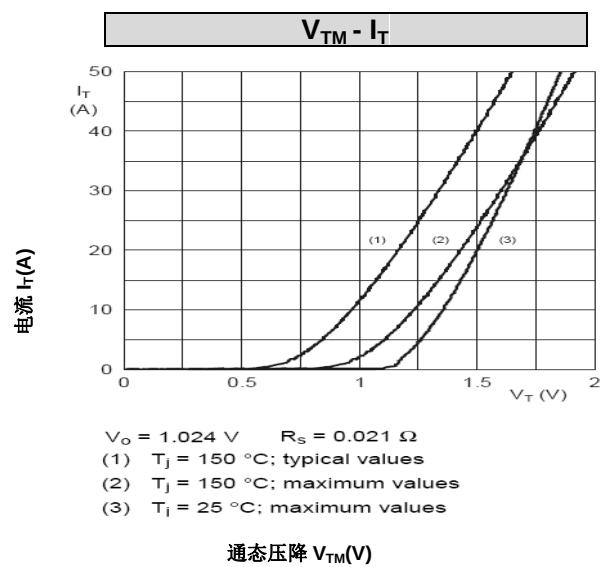
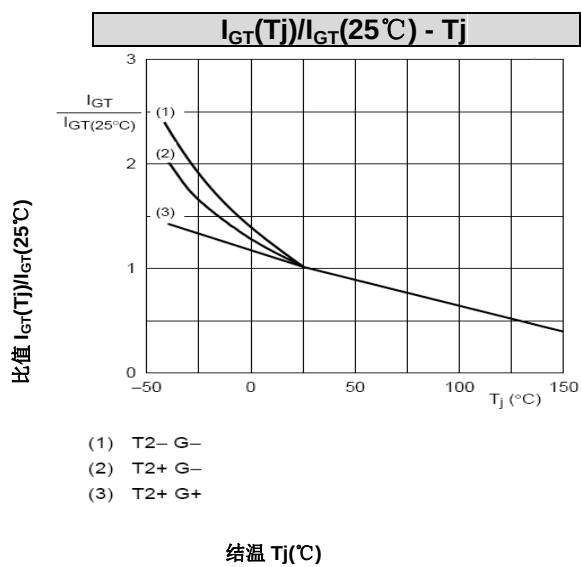
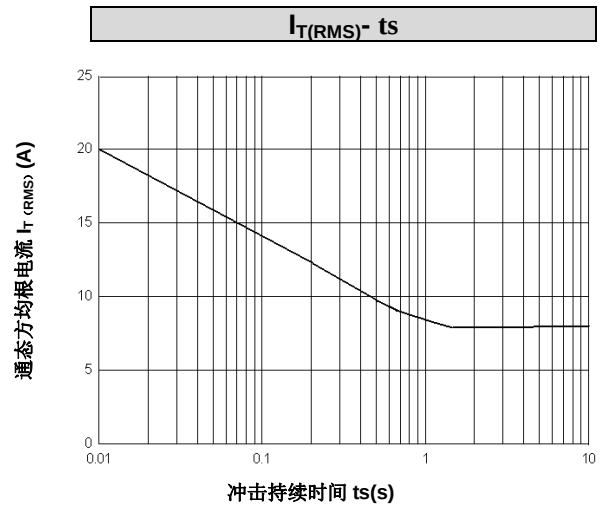
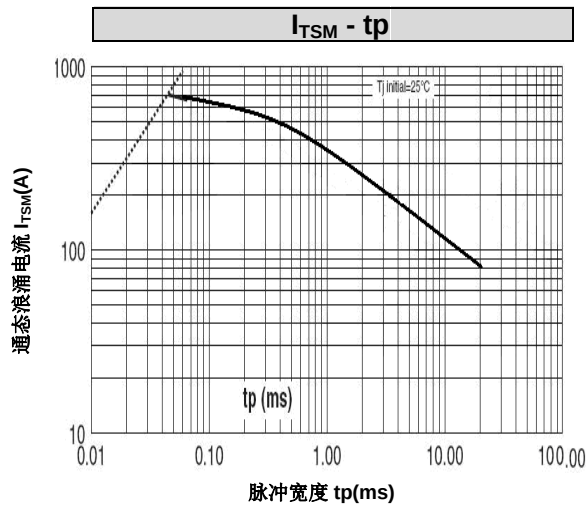
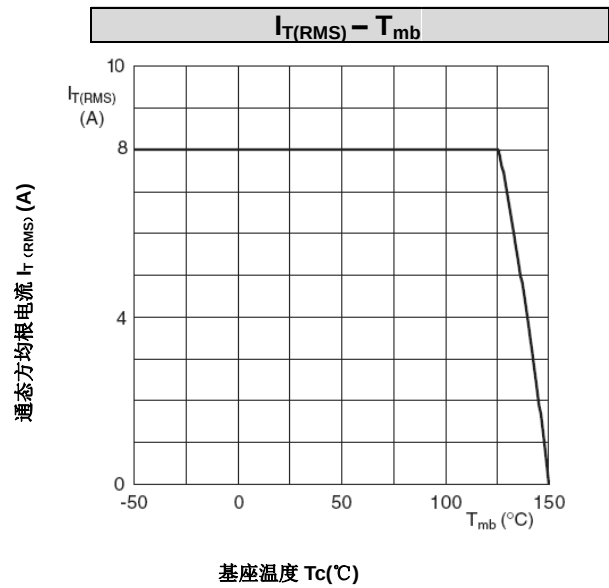
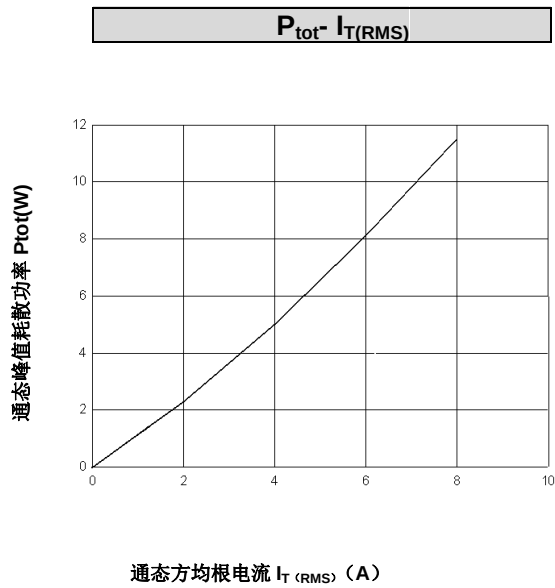
热特性 THERMAL CHARACTERISTIC

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	$R_{\text{th(j-mb)}}$	full cycle(TO-220MF-K1)			2.0	$^\circ\text{C/W}$





特征曲线 ELECTRICAL CHARACTERISTICS (curves)



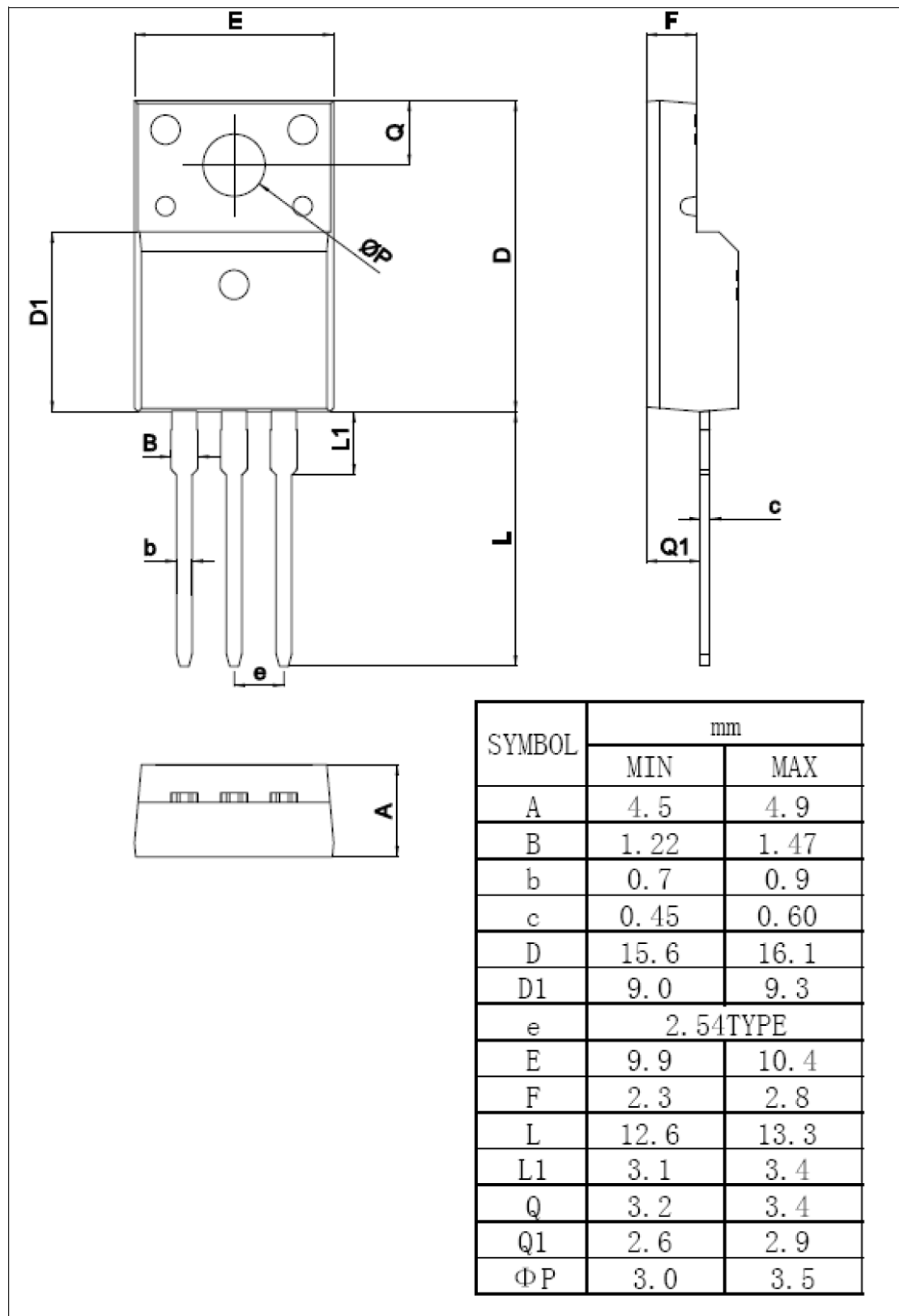


T0835NF1P

外形尺寸 PACKAGE MECHANICAL DATA

TO-220MF-K1

单位 Unit : mm



**注意事项**

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