

T0835NUP/T0835NSP

主要参数 MAIN CHARACTERISTICS

$I_{T(RMS)}$	8A
V_{DRM}	800V
I_{GT}	27mA

用途

- 交流开关
- 相位控制

APPLICATIONS

- AC switching
- Phase control

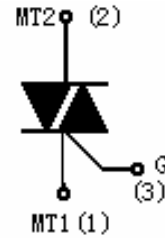
产品特性

- 超高 DV/DT 能力
- 三象限可控硅, 触发电流的一致性 好
- 环保 RoHS 产品

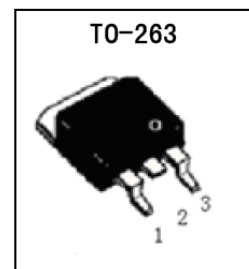
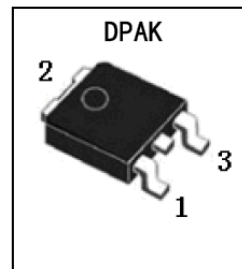
FEATURES

- Ultra high DV/DT
- 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		
T0835NUP-R-B	T0835NUP-R-BR	T0835NUP-R-A	T0835NUP-R-AR	T0835NUP	DPAK
T0835NSP-S-B	T0835NSP-S-BR	T0835NSP-S-A	T0835NSP-S-AR	T0835NSP	TO-263

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	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°C)

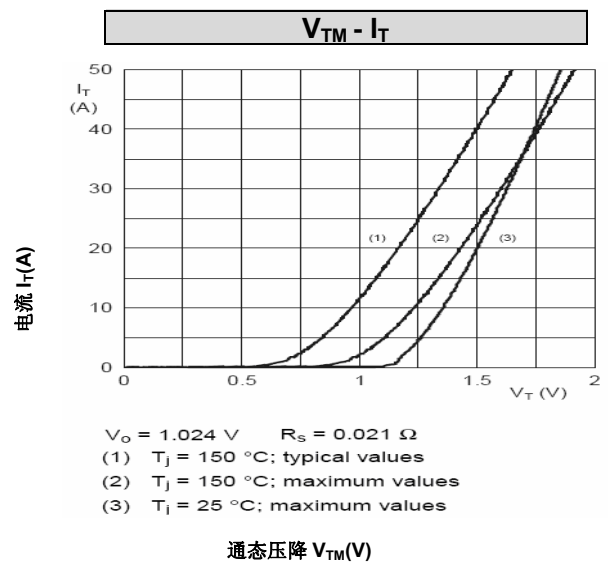
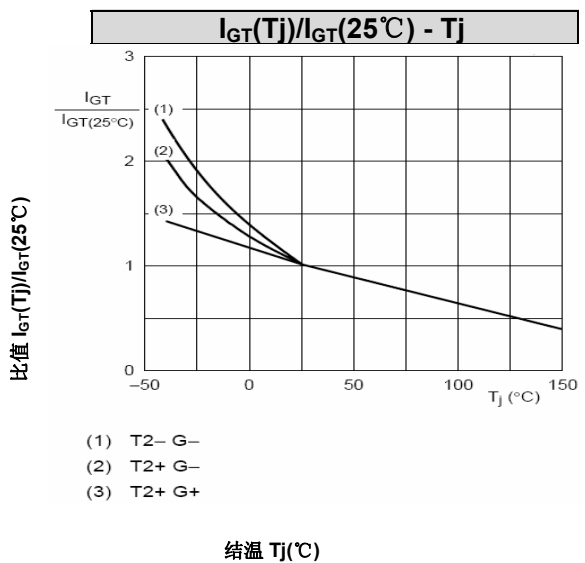
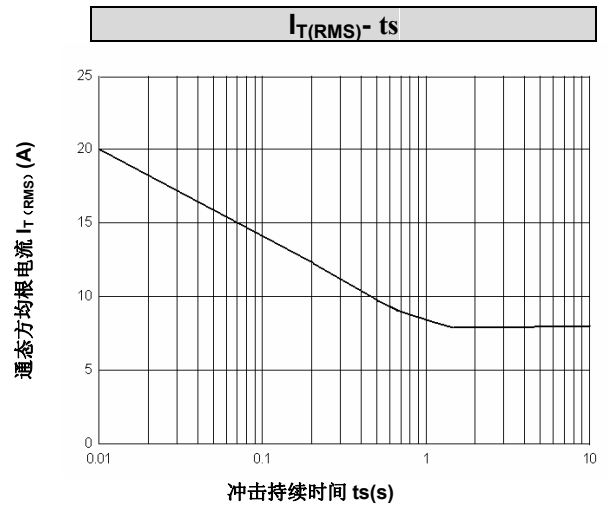
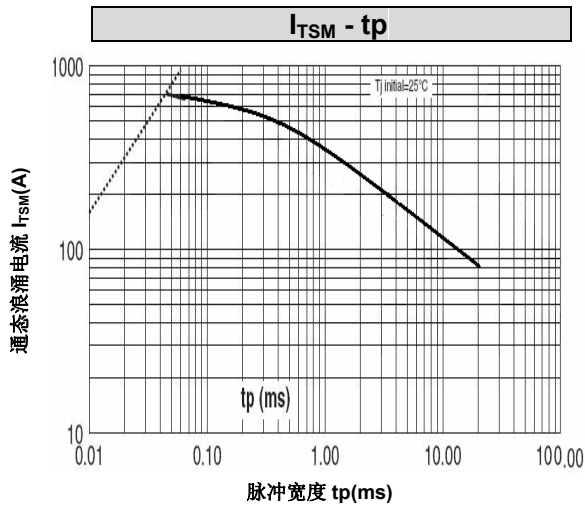
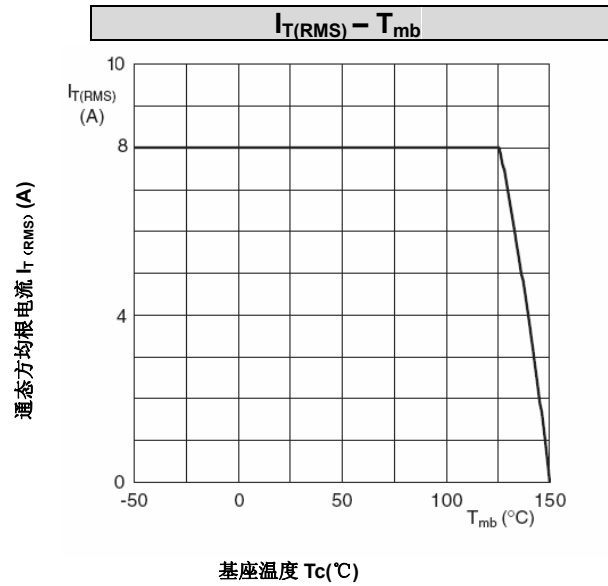
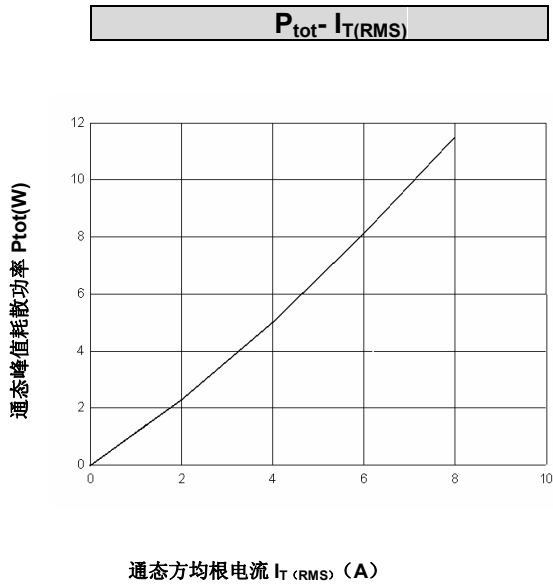
项 目 Parameter	符 号 Symbol	测 试 条 件 Condition	最小 Min	典型 Typ	最大 Max	单位 Unit	
峰值重复断态电流 Peak Repetitive Blocking Current	I _{DRM}	V _{DM} =V _{DRM} , T _j =150°C, gate open	-	-	0.8	mA	
峰值通态电压 Peak on-state voltage	V _{TM}	I _{TM} =11.3A	-	1.3	1.7	V	
门极触发电流 Gate trigger current	I _{GT}	V _{DM} =12V, R _L =100 Ω	MT1(-),MT2(+),G(+)	2	-	27	mA
			MT1(-),MT2(+),G(-)	2	-	27	mA
			MT1(+),MT2(-),G(-)	2	-	27	mA
门极触发电压 Gate trigger voltage	V _{GT}	V _{DM} =12V, R _L =100 Ω	MT1(-),MT2(+),G(+)	-	0.7	1.5	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 _{DM} =12V, I _{GT} =0.1A	-	-	50	mA	
擎住电流 Latching current	I _L	V _{DM} =12V, I _{GT} =0.1A	MT1(-),MT2(+),G(+)	-	-	50	mA
			MT1(-),MT2(+),G(-)	-	-	75	mA
			MT1(+),MT2(-),G(-)	-	-	50	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 =150°C, gate open	1000	-	-	V/μs	
门极开通时间 Gate controlled turn-on time	t _{gt}	I _{TM} =12A, V _{DM} =V _{DRM(MAX)} , I _G =0.1A, dI _G /dt=5A/μs	-	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 case	R _{th(j-mb)}	full cycle(DPAK/TO-263)			2.0	°C/W



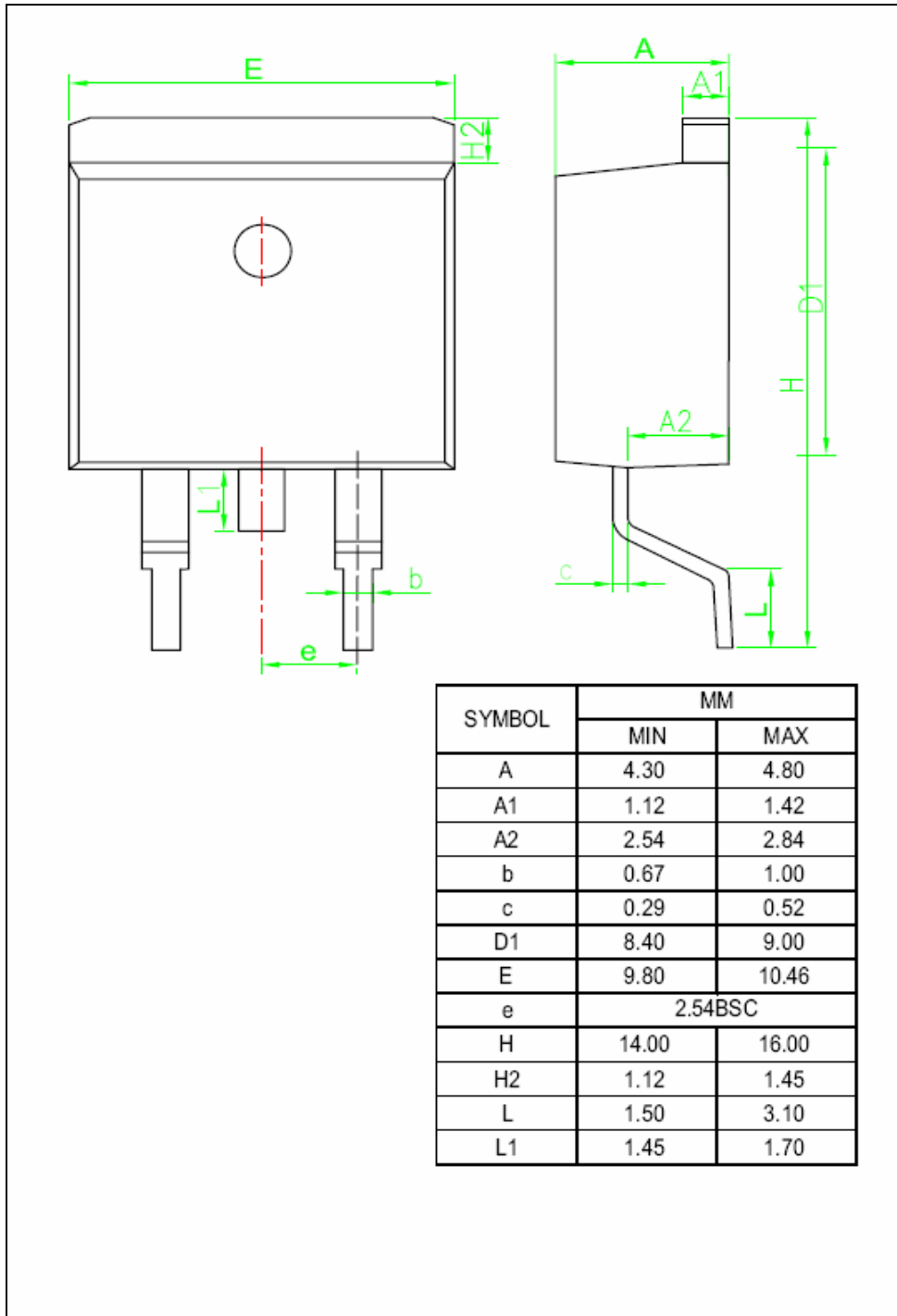
特征曲线 ELECTRICAL CHARACTERISTICS (curves)



外形尺寸 PACKAGE MECHANICAL DATA

TO-263

单位 Unit : mm



外形尺寸 PACKAGE MECHANICAL DATA

DPAK

单位 Unit : mm

