

3FT1N2

主要参数 MAIN CHARACTERISTICS

$I_{T(RMS)}$	1.0A
V_{DRM}	800V
I_{GT}	10mA

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
- 低通态电流和高浪涌电流能力
- 环保 RoHS 产品

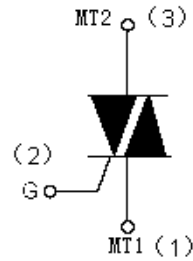
APPLICATIONS

- AC switching
- Phase control

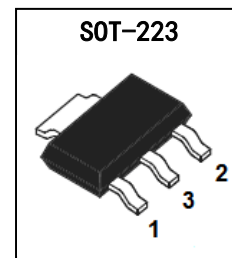
FEATURES

- Glass-passivated mesa chip for high reliability and uniform
- Low on-state voltage and High I_{TSM}
- RoHS products

封装 Package



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



订货信息 ORDER MESSAGES

订货型号 Order codes		印记 Marking	封装 Package
有卤-编带 Halogen-Reel	无卤-编带 Halogen-Free- Reel	3FT1N2	SOT-223
3FT1N2-NC-A	3FT1N2-NC-AR		

绝对最大额定值 ABSOLUTE RATINGS (T_c=25°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 _{T(RMS)}	full sine wave	1.0	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	10	A
		full sine wave ,t=16.7ms	11	A
	I ² t	t=10ms	0.5	A ² s
通态电流临界上升率 Repetitive rate of rise of on-state current after triggering	di/dt	MT1(-),MT2(+),G(+) MT1(-),MT2(+),G(-) MT1(+),MT2(-),G(-)	50	A/μs
峰值门极电流 Peak gate current	I _{GM}		2	A
平均门极功率 Average gate power	P _{G(AV)}		0.5	W
存储温度 Storage temperature	T _{stg}		-40~150	°C
操作结温 Operation junction temperature	T _{VJ}		125	°C

电特性 ELECTRICAL CHARACTERISTIC (T_C=25°C)

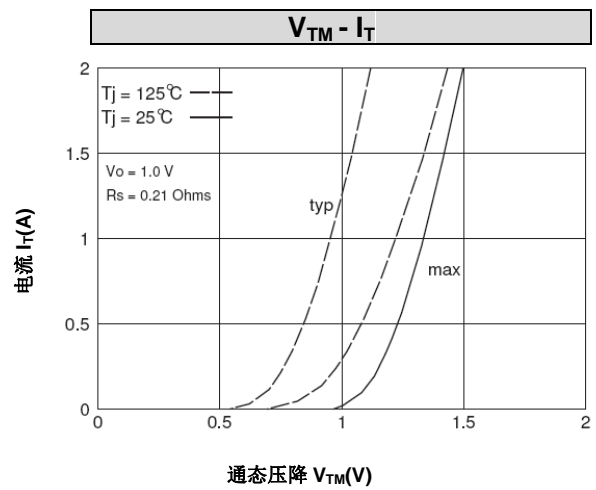
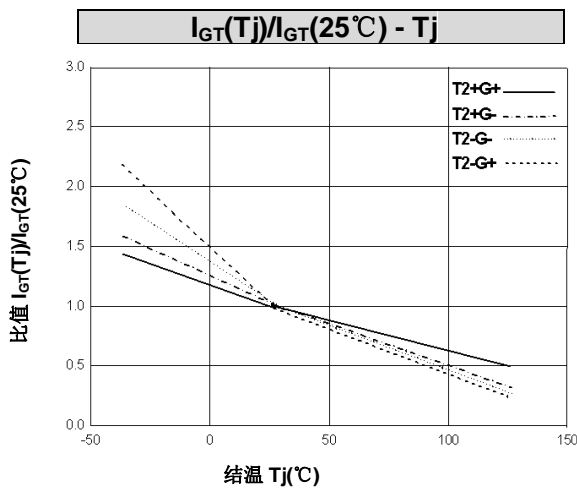
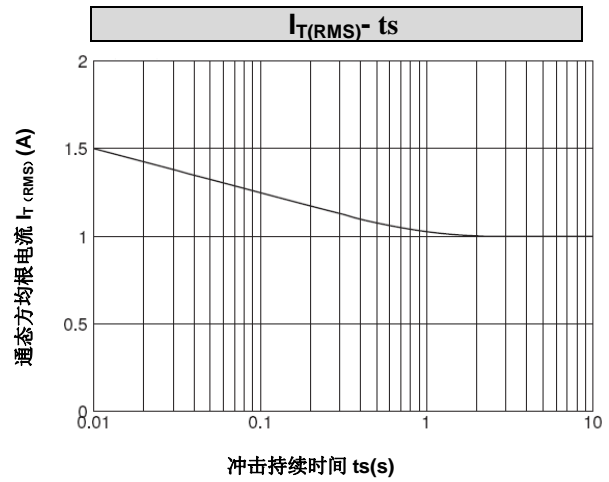
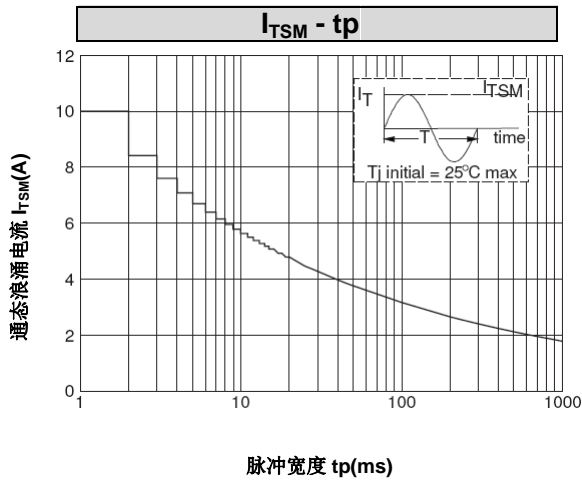
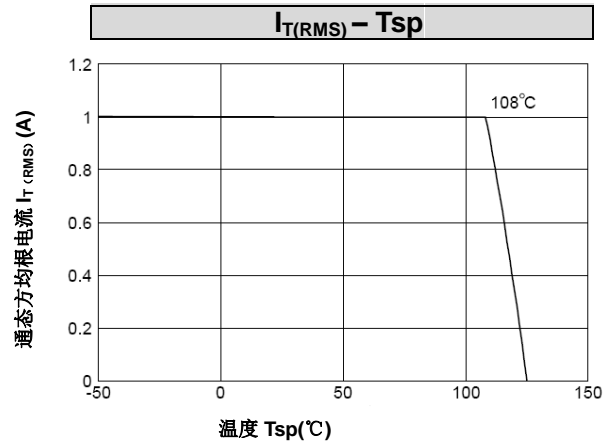
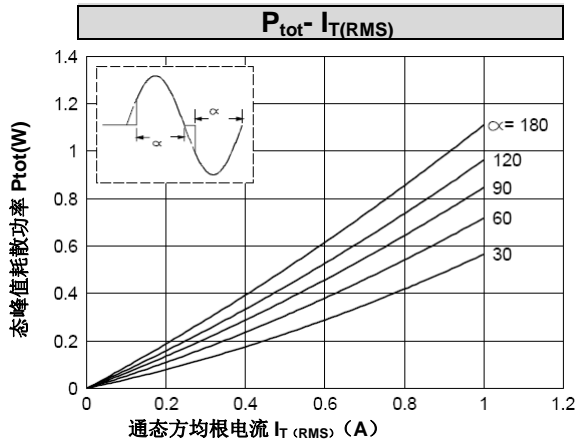
项 目 Parameter	符 号 Symbol	测 试 条 件 Condition	最小 Min	典型 Typ	最大 Max	单位 Unit	
峰值重复断态电流 Peak Repetitive Blocking Current	I _{DRM}	V _{DM} =V _{DRM} , T _j =125°C, gate open	-	-	0.5	mA	
峰值通态电压 Peak on-state voltage	V _{TM}	I _{TM} =2A	-	-	1.5	V	
门极触发电流 Gate trigger current	I _{GT}	V _{DM} =12V, R _L =100Ω	-	-	10	MT1(-),MT2(+),G(+)	mA
						MT1(-),MT2(+),G(-)	mA
						MT1(+),MT2(-),G(-)	mA
		MT1(+),MT2(-),G(+)	25	mA			
门极触发电压 Gate trigger voltage	V _{GT}	V _{DM} =12V,R _L =100Ω	-	-	1.5	V	
维持电流 Holding current	I _H	V _{DM} =12V, I _{GT} =0.1A	-	-	15	mA	
擎住电流 Latching current	I _L	V _{DM} =12V, I _{GT} =0.1A	-	-	20	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	-	30	-	V/μs	

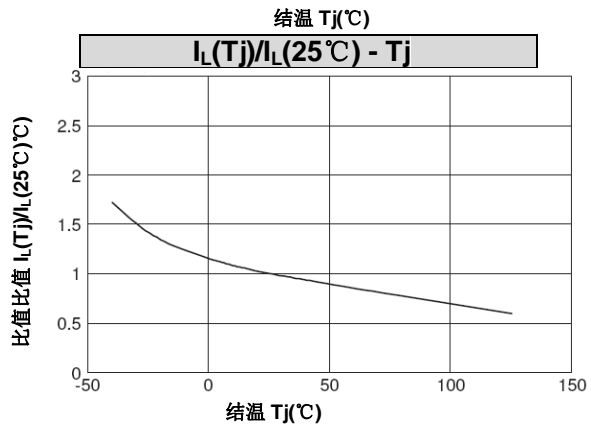
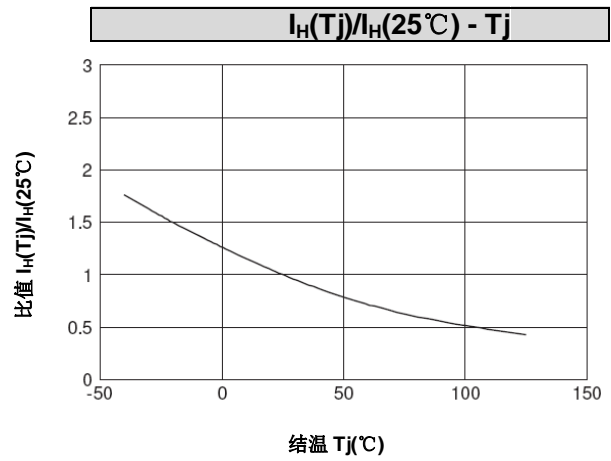
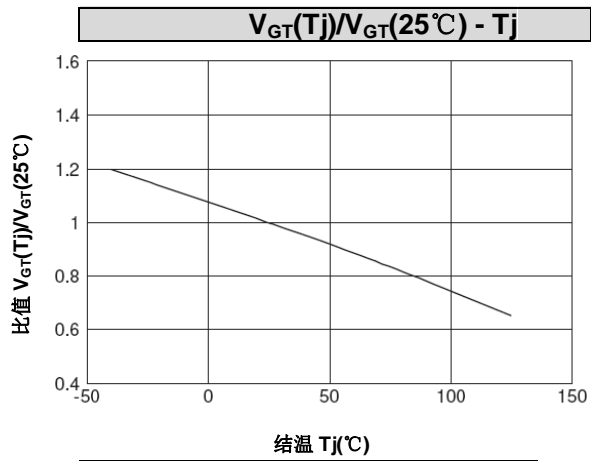
热特性 THERMAL CHARACTERISTIC

项 目 Parameter	符 号 Symbol	条 件 Condition	最小 Min	典型 Typ	最大 Max	单位 Unit
结到引线的热阻 Thermal resistance junction to solder point	R _{th(j-sp)}	full cycle (SOT-223)	-	-	15	°C/W

特征曲线 ELECTRICAL CHARACTERISTICS (curves)

特征曲线 ELECTRICAL CHARACTERISTICS (curves)





外形尺寸 PACKAGE MECHANICAL DATA

SOT-223

单位 Unit : mm

