

BT134		
	双向可控硅 TRIAC	版本号 201603-A

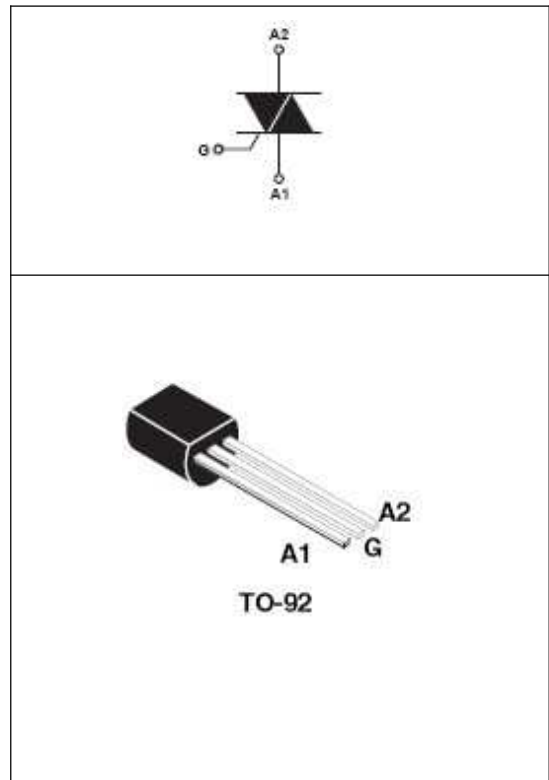
产品概述 GENERAL DESCRIPTION

BT131 双向可控硅采用穿通隔离台面结构，复合玻璃钝化PN结表面保护工艺技术，dv/dt高，可靠性高，适用于控温、调光、马达控制。

BT131 Triacs is fabricated using separation diffusion processes ,the junction termination areas are passivated with glass. Thanks to highly dv/dt and reliability,the Triacs series is suitable for domestic lighting ,heating and motor speed controllers.

主要参数 MAIN CHARACTERISTICS

参数 Parameter	数值 Value	单位 Unit
$I_{T(RMS)}$	1	A
V_{DRM}/V_{RRM}	600	V
$I_{GT(IV)}$	≤ 7	mA



产品特性 FEATURES

- | | |
|---|---|
| <ul style="list-style-type: none"> ● dv/dt高 ● 通态压降低 ● Rohs环保产品 | <ul style="list-style-type: none"> ● Highly dv/dt ● Low on-state voltage ● Rohs Products |
|---|---|

应用领域 APPLICATIONS

主要应用于调光、控温、马达控制。

domestic lighting ,heating and motor speed controllers.

极限值(除非另有规定, Tj=25℃) ABSOLUTE RATINGS

(Tj=25℃, unless otherwise specified)

符号 Symbol	参数 Parameter	数值 Value	单位 Unit
I _{T(RMS)}	RMS 通态电流 RMS on-state current (full sine wave)	T _C =90℃	1 A
I _{TSM}	通态峰值浪涌电流 Non repetitive surge peak on-state current	F=50Hz, t=20ms	12.5 A
I ² t	I ² t 耗散值 I ² t value for fusing	T _p =10ms	0.78 A ² s
di/dt	通态电流上升值 Critical rate of rise of on-state current	F=120Hz, Tj=125℃	50 A/μs
I _{GM}	门极峰值电流 Peak gate current	T _p =20μs, Tj=125℃	2 A
P _{G(AV)}	平均门极耗散功率 Average gate power dissipation	Tj=125℃	0.1 W
T _{stg}	贮存结温范围 Storage junction temperature range		-40+150 ℃
T _j	工作结温范围 Operating junction temperature range		-40+125 ℃

电参数(除非另有规定, Tj=25℃) ELECTRICAL CHARACTERISTICS

(Tj=25℃, unless otherwise specified)

参数 Parameter	符号 Symbol	规范值 Value	单位 Unit	测试条件 Test Conditions
触发电流 Gate trigger current	I _{GT}	I ~ III	≤5	V _D =12V, I _T =0.1A
		IV	≤7	
触发电压 Gate trigger voltage	V _{GT}	I ~ IV	≤1.5	V _D =12V, I _T =0.1A
维持电流 Holding current	I _H		≤5	V _D =12V, I _T =0.1A
擎住电流 Latching current	I _L	I、III	≤5	V _D =12V, I _T =0.1A
		II、IV	≤8	
电压上升率 Rise of off- state voltage	dv/dt		≥5	V _D =67%V _{DRM}
通态压降 Peak on-state voltage	V _{TM}		≤1.5	I _T =2.0A
断态漏电流 Peak repetitive forward blocking current	I _{DRM} I _{RRM}		≤5	V _{RRM} =V _{DRM} , Tj = 25℃
			≤0.5	V _{RRM} =V _{DRM} , Tj = 125℃

热特性 THERMAL RESISTANCES

符号 Symbol	参数 Parameter	数值 Value	单位 Unit
Rth(j-c)	Junction to case(AC)	60	K/W
Rth(j-a)	Junction to ambient	150	K/W

特征曲线 ELECTRICAL CHARACTERISTICS (CURVES)

图1 最大耗散功率与RMS通态电流关系

Fig.1.Maximum Power Dissipation Versus on-state current

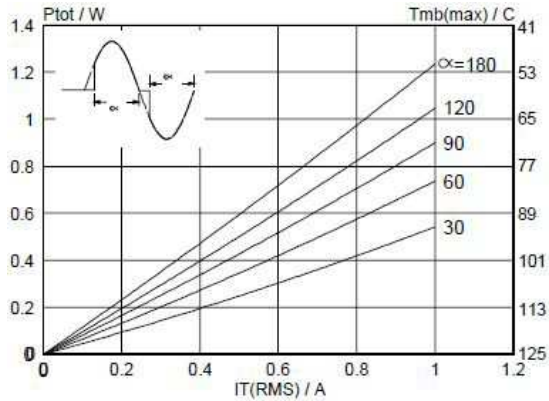


图3 通态特性

Fig.3.On-State Characteristics

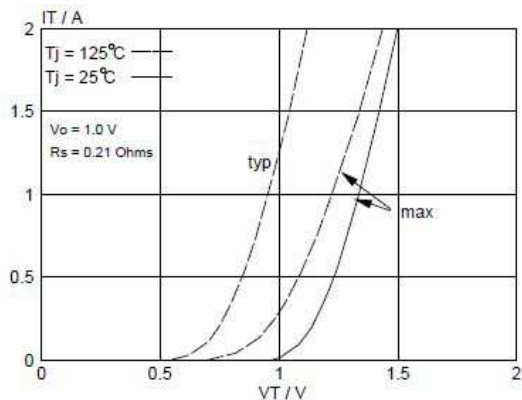


图2 RMS通态电流与Tc温度关系

Fig.2. RMS On-state Current Versus TL

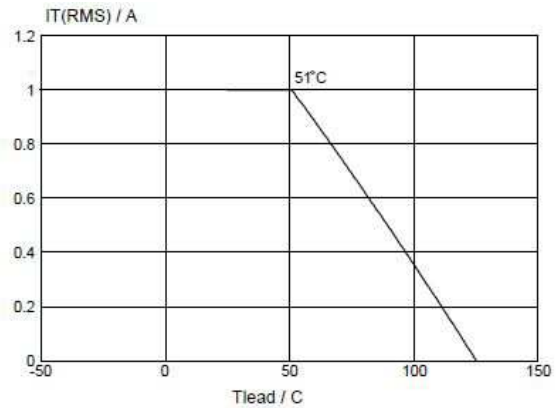


图4 通态浪涌峰值电流与周期数关系

Fig.4.Surge Peak On-state Current Versus Number Cycles

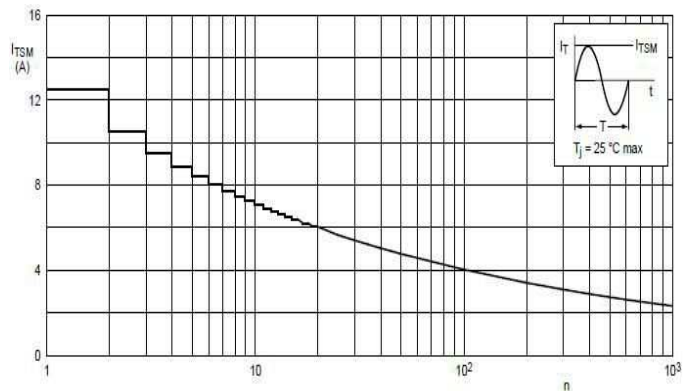
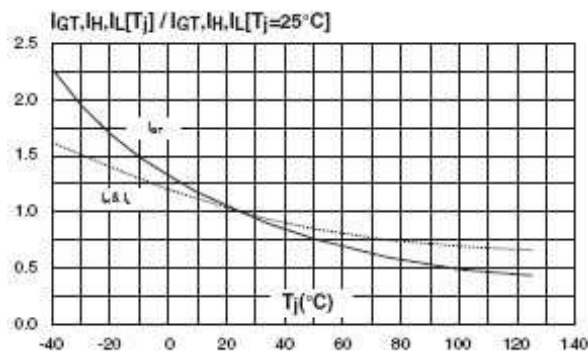


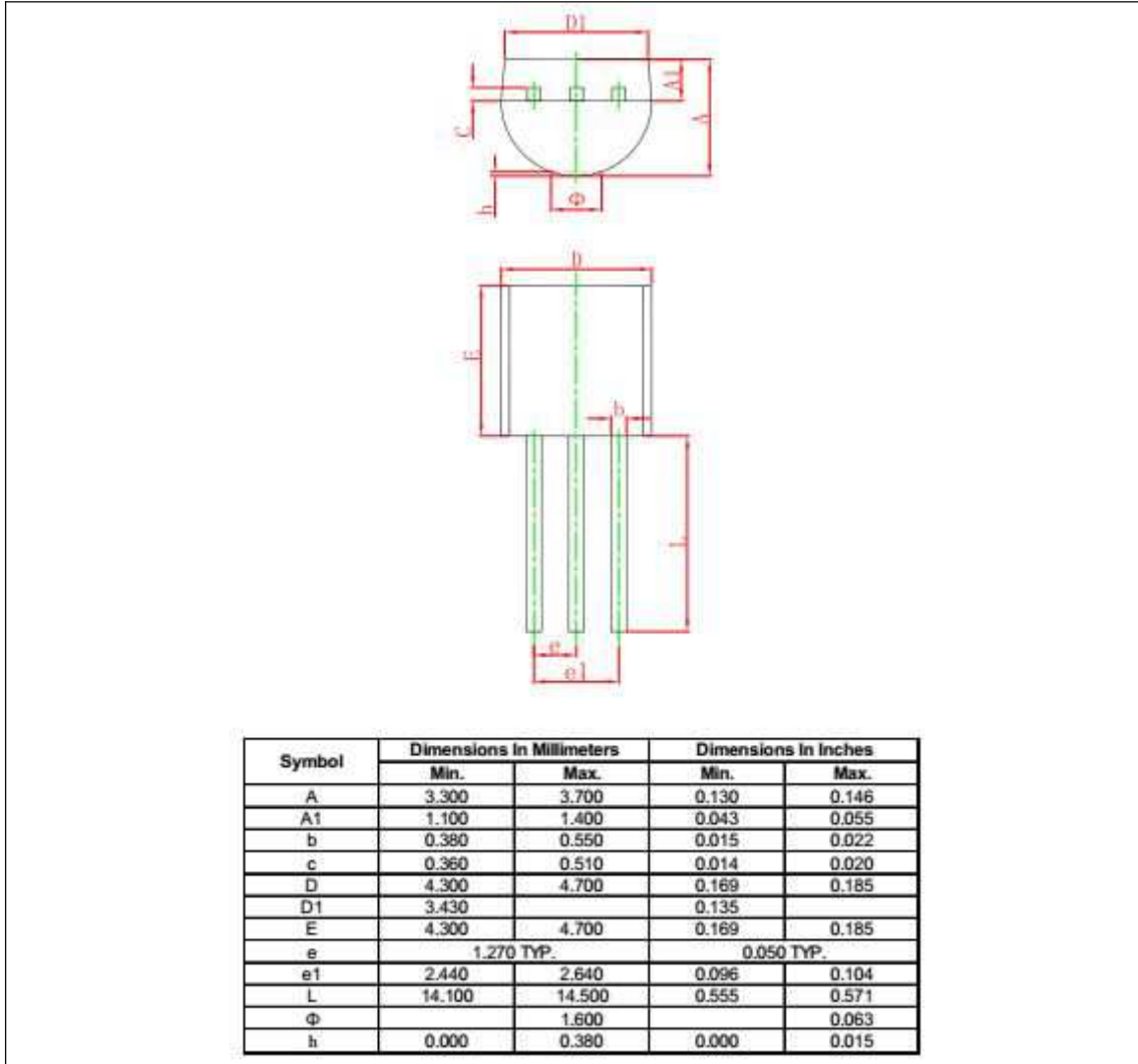
图5 I_{GT}、I_H、I_L相对值（相对于25°C）与结温关系

Fig.5.Relative Variation Of Gate Trigger Current, Holding Current And Latching Current Versus Junction Temperature (Typical Value)



封装尺寸 PACKAGE MECHANICAL DATA

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