

BT136		
	双向可控硅 TRIAC	版本号 201603-A

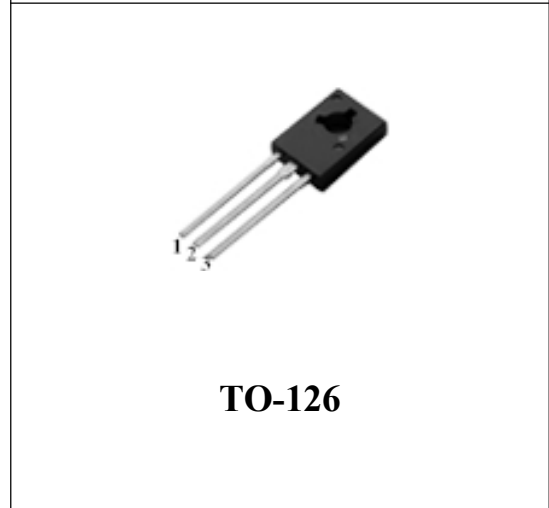
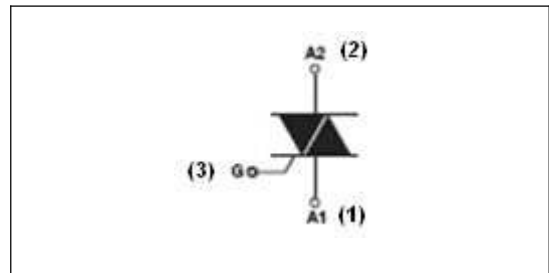
产品概述 GENERAL DESCRIPTION

BT136 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。

BT136 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
$I_{T(RMS)}$	4	A
V_{DRM}/V_{RRM}	600&800	V
$I_{GT(III)}$	≤ 25	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, T_j=25℃) ABSOLUTE RATINGS

(T_j=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 ≤107℃	4 A
I _{TSM}	通态峰值浪涌电流 Non repetitive surge peak on-state current	F=50Hz, t=20ms	25 A
I ² t	I ² t 耗散值 I ² t value for fusing	T _P =10ms	3.1 A ² s
di/dt	通态电流上升值 Critical rate of rise of on-state current	F=120Hz, T _j =125℃	50 A/μs
I _{GM}	门极峰值电流 Peak gate current	T _P =20μs, T _j =125℃	2 A
P _{G(AV)}	平均门极耗散功率 Average gate power dissipation	T _j =125℃	0.5 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, T_j=25℃) ELECTRICAL CHARACTERISTICS

(T_j=25℃, unless otherwise specified)

参数 Parameter	符号 Symbol		规范值	Value	单位 Unit	测试条件 Test Conditions
			D	E		
触发电流 Gate trigger current	I _{GT}	I ~ III	5	10	mA	V _D =12V, I _T =0.1A
		IV	10	25		
触发电压 Gate trigger voltage	V _{GT}	I ~ IV	≤1.5		V	V _D =12V, I _T =0.1A
维持电流 Holding current	I _H		10	20	mA	V _D =12V, I _T =0.1A
擎住电流 Latching current	I _L	I、III	10	15	mA	V _D =12V, I _T =0.1A
		II、IV	15	20		
电压上升率 Rise of off- state voltage	dv/dt		5	50	V/μS	V _D =67%V _{DRM}
通态压降 Peak on-state voltage	V _{TM}		1.7		V	I _T =5.5A
断态漏电流 Peak repetitive forward blocking current	I _{DRM} I _{RRM}		5		μA	V _{RRM} =V _{DRM} , T _j =25℃
			0.8		mA	V _{RRM} =V _{DRM} , T _j =125℃

热特性 THERMAL RESISTANCES

符号 Symbol	参数 Parameter	数值 Value	单位 Unit
R _{th(j-c)}	Junction to case(AC)	4.1	K/W
R _{th(j-a)}	Junction to ambient	100	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

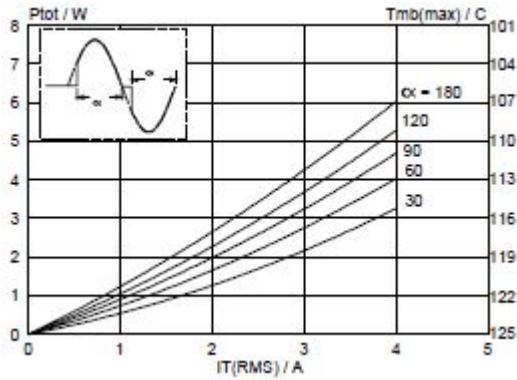


图3 通态特性

Fig.3.On-State Characteristics

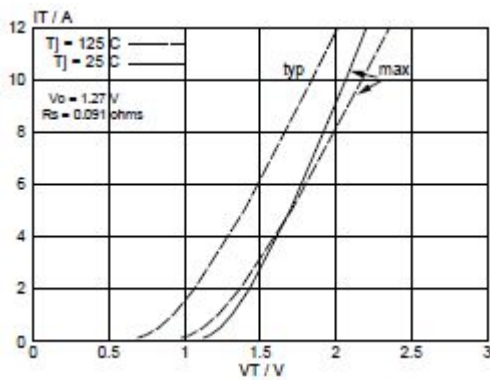


图2 RMS通态电流与Tc温度关系

Fig.2. RMS On-state Current Versus TL

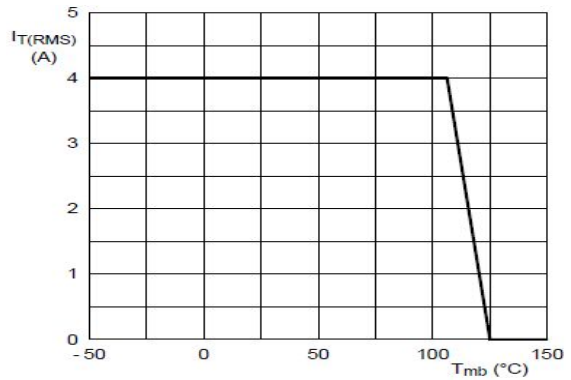


图4 通态浪涌峰值电流与周期数关系

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

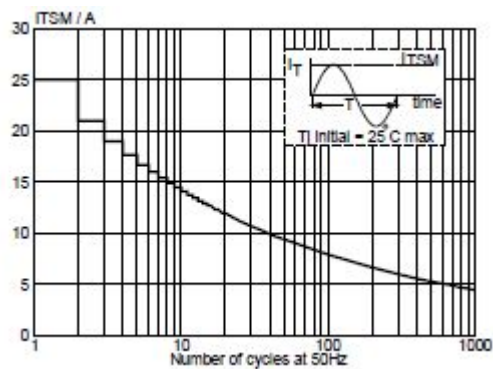
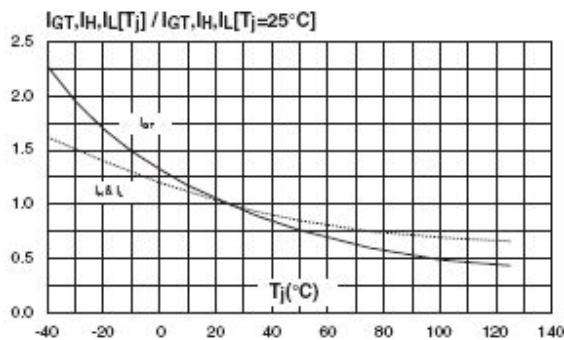


图5 IGT、IH、IL相对值（相对于25°C）与结温关系

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

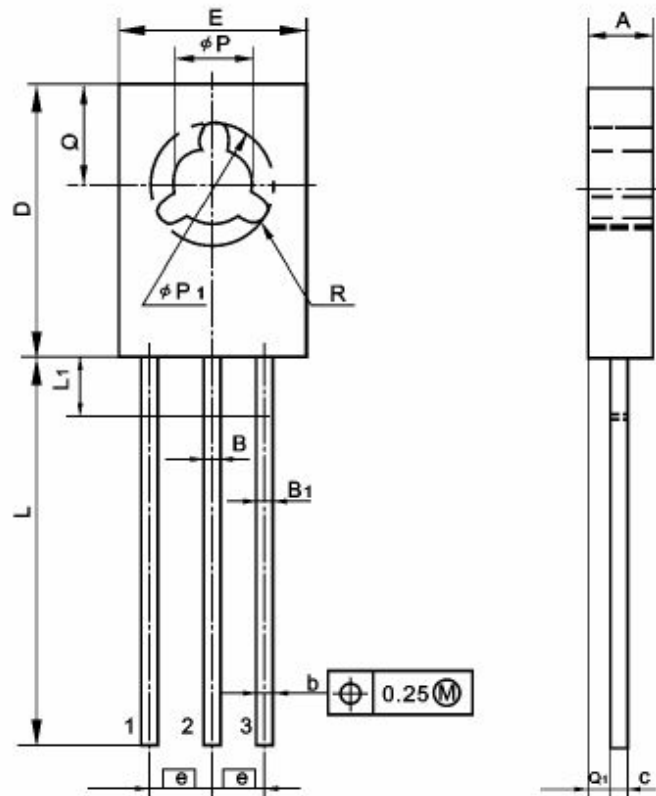


封装尺寸 PACKAGE MECHANICAL DATA

TO-126

UNIT: mm

SYMBOL	min	nom	max	SYMBOL	min	nom	max
A	2.3		2.8	L	15.3		16.5
B	1.0		1.2	L1			2.54
B1	0.8		1.0	ϕP	3.0		3.2
b	0.65		0.88	$\phi P1$		5.0	
c	0.45		0.60	Q	3.6		4.4
D	10.5		11.1	Q1	0.9		1.5
E	7.2		7.8	R		0.5*	
e		2.29					



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