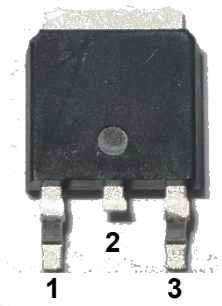
BT136

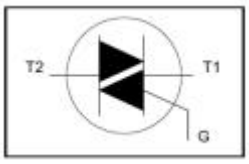
MAIN FEATURES

Symbol	value		unit
$I_{T(RMS)}$	4		A
V_{DRM}/V_{RRM}	600	800	V
I_{TSM}	25		A

TO-252-2L

PIN1:T1
PIN2:T2
PIN3:G

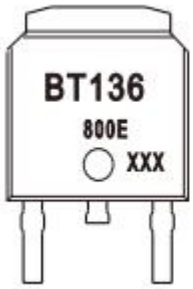




GENERAL DESCRIPTION

Glass passivated triacs in plactic envelope，intended for use in Applications requiring high bidirectional transient and blocking Voltage capability and high thermal cycling performance.Typical Applications include motor control,industrial and domestic lighting, Heating and static switching.

Marking



BT136= Company and Device code
Solid dot = Green molding compound device, if none, the normal device
800E: VDRM/VRRM=800V
XXX=Code

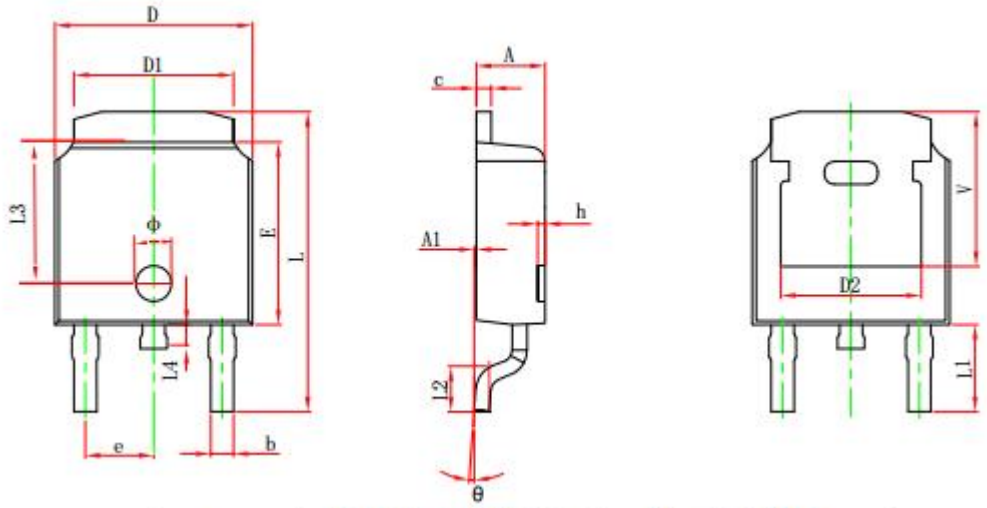
ABSOLUTE MAXIMUM RATINGS(Ta=25℃ unless otherwise noted)

Symbol	Parameter		Value		Unit
			600E	800E	
V_{DRM}	Repetitive peak off-state voltage		600	800	V
$I_{T(RMS)}$	RMS on-state current(full sine wave)		4		A
I_{TSM}	Non repetitive surge peak on-state current(full sine wave,Tj=25℃)	t=20ms	25		A
		t=16.7ms	27		
I_{GM}	Peak gate current		2		A
I^2t	I^2t for fusing	t=10ms	3.1		A^2S
V_{GM}	Peak gate voltage		5.0		V
$P_{G(AV)}$	Average gate Power Dissipation	Tj=125℃	0.5		W
P_{GM}	Peak gate Power		5.0		W
Dit/dt	Repetitive rate of rise of on-state current after triggering	T2+G+	50		A/μs
Tj	Junction Temperature		125		℃
Tstg	Storage Temperature		-40 to 150		℃
RθJA	Thermal Resistance From Junction To Ambient		60		K/W

ELECTEICAL CHARACTERISTICS(Ta=25℃ unless otherwise specified)

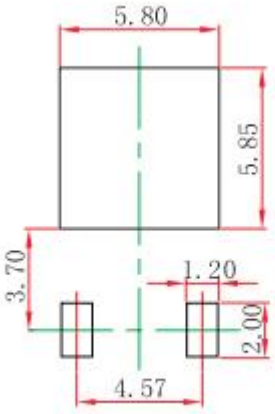
Parameter	Symbol	Test conditions		Min	Typ	Max	Unit
Gate trigger current	IGT	V_D=12V; I_T=0.1A	T2+G+		5	50	mA
			T2+G-		8	50	
			T2-G-		11	50	
			T2-G+		30	100	
Latching current	IL	V_D=12V; I_{GT}=0.1A	T2+G+		7	30	mA
			T2+G-		16	45	
			T2-G-		5	30	
			T2-G+		7	45	
Holding current	I_H	V_D=12V;I_{GT}=0.1A			5.0	30	mA
On-state voltage	V_T	I_T=5.0A			1.4	1.7	V
Gate trigger voltage	V_{GT}	V_D=12V;I_T=0.1A		0.25	0.7	1.5	V
		V_D=400V;I_T=0.1A; Tj=125℃			0.4		
Off-state leakage current	I_D	V_D=VDRM(max);Tj=125℃			0.1	0.5	mA
Repetitive peak off-state current	dV_D/dt	V_D=67%VDRM(max)gate open;Tj=125℃		10	50		μs
Critical rate of rise of off-state current	t_{gt}	I_{TM}=6A,V_D=VDRM(max), I_G=0.1A,dI_g/dt=5A/μs			2.0		V/μs

TO-252-2L Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	2.200	2.400	0.087	0.094
A1	0.000	0.127	0.000	0.005
b	0.635	0.770	0.025	0.030
c	0.460	0.580	0.018	0.023
D	6.500	6.700	0.256	0.264
D1	5.100	5.460	0.201	0.215
D2	4.830 REF.		0.190 REF.	
E	6.000	6.200	0.236	0.244
e	2.186	2.386	0.086	0.094
L	9.712	10.312	0.382	0.406
L1	2.900 REF.		0.114 REF.	
L2	1.400	1.700	0.055	0.067
L3	4.460 REF.		0.1756 REF.	
L4	0.600	1.000	0.024	0.039
Φ	1.100	1.300	0.043	0.051
θ	0°	8°	0°	8°
h	0.000	0.300	0.000	0.012
V	5.250 REF.		0.207 REF.	

TO-252-2L Suggested Pad Layout



Note:
1.Controlling dimension:in millimeters.
2.General tolerance:± 0.05mm.
3.The pad layout is for reference purposes only.