

## TYPE: BT136 TRIAC

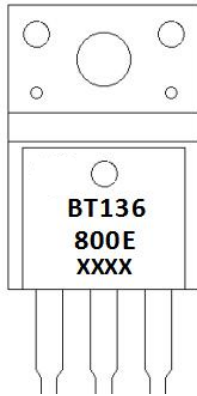
### MAIN FEATURES

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

### GENERAL DESCRIPTION

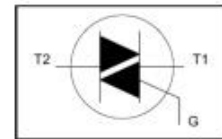
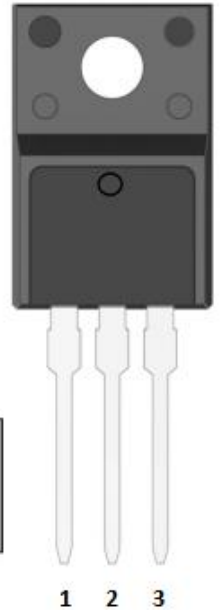
Glass passivated triacs in plastic envelope, intended for use in Applications requiring high bidirectional transient and blocking Voltage capability and high thermal cycling performance. Typical Applications include motor control, industrial and domestic lighting, Heating and static switching.

### Marking



BT136=Device code  
 Solid dot=Green molding compound device  
 if none, normal device  
 800E= $V_{DRM}/V_{RRM}$   
 xxxx =HY and Code

TO-220F  
 PIN1: T1  
 PIN2: T2  
 PIN3: G



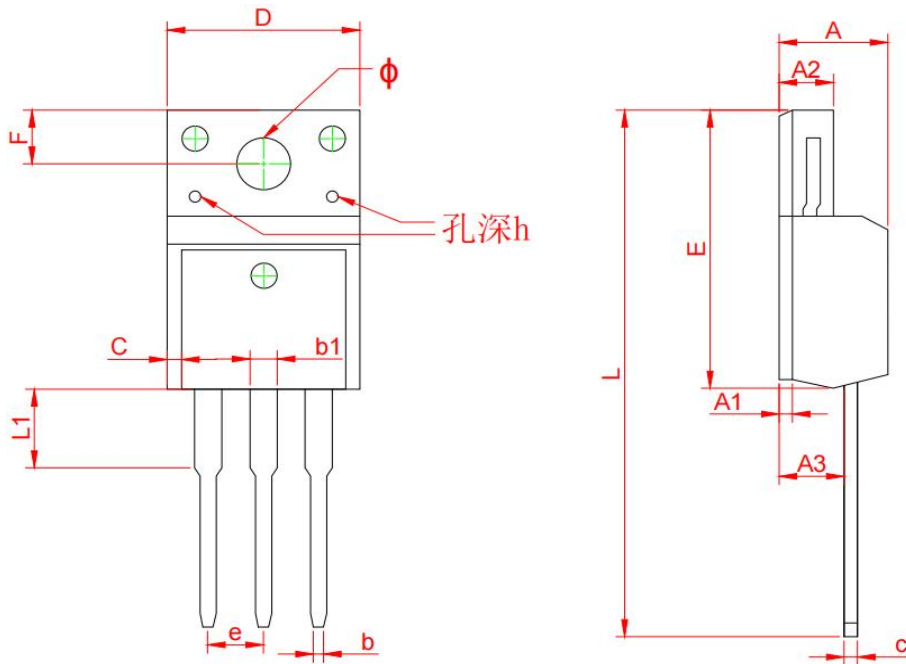
### ABSOLUTE MAXIMUM RATINGS( $T_a=25^{\circ}\text{C}$ unless otherwise noted)

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, $T_j=25^{\circ}\text{C}$ )	$t=20\text{ms}$	25	A
		$t=16.7\text{ms}$	27	
$I_{GM}$	Peak gate current	2		A
$I^2t$	$I^2t$ for fusing	$t=10\text{ms}$	3.1	$\text{A}^2\text{S}$
$V_{GM}$	Peak gate voltage	5.0		V
$P_{G(AV)}$	Average gate Power Dissipation	$T_j=125^{\circ}\text{C}$	0.5	W
$P_{GM}$	Peak gate Power	5.0		W
$Di/dt$	Repetitive rate of rise of on-state current after triggering	T2+G+	50	$\text{A}/\mu\text{s}$
$T_j$	Junction Temperature	125		$^{\circ}\text{C}$
$T_{stg}$	Storage Temperature	-40 to 150		$^{\circ}\text{C}$
$R\theta_{JA}$	Thermal Resistance From Junction To Ambient	60		K/W

## ELECTEICAL CHARACTERISTICS(Ta=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit	
Gate trigger current	IGT	VD=12V; IT=0.1A	T2+G+		5	50	mA
			T2+G-		8	50	
			T2-G-		11	50	
			T2-G+		30	100	
Latching current	IL	VD=12V; IGT=0.1A	T2+G+		7	30	mA
			T2+G-		16	45	
			T2-G-		5	30	
			T2-G+		7	45	
Holding current	IH	VD=12V;IGT=0.1A		5.0	30	mA	
On-state voltage	VT	IT=5.0A		1.4	1.7	V	
Gate trigger voltage	VGT	VD=12V;IT=0.1A	0.25	0.7	1.5	V	
		VD=400V;IT=0.1A; Tj=125°C		0.4			
Off-state leakage current	ID	VD=VDRM(max);Tj=125°C		0.1	0.5	mA	
Repetitive peak off-state current	dVD/dt	VD=67%VDRM(max)gate open;Tj=125°C	10	50		µs	
Critical rate of rise of off-state current	tgt	ITM=6A,VD=VDRM(max), IG=0.1A,dIg/dt=5A/µs		2.0		V/µs	

## TO-220F Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	4.300	4.750	0.169	0.185
A1	1.830 REF.		0.072 REF.	
A2	2.300	2.850	0.090	0.112
A3	2.500	2.900	0.098	0.114
b	0.400	0.420	0.016	0.016
b1	1.220	1.280	0.048	0.050
C	0.690	0.720	0.027	0.028
c	0.490	0.510	0.019	0.020
D	9.960	10.200	0.392	0.400
E	15.000	15.950	0.588	0.625
e	2.574 TYP.		0.101 TYP.	
F	3.470 REF.		0.136 REF.	
Φ	3.200 REF.		0.125 REF.	
h	0.000	0.300	0.000	0.012
L	28.780	28.900	1.128	1.133
L1	2.990	3.100	0.117	0.122