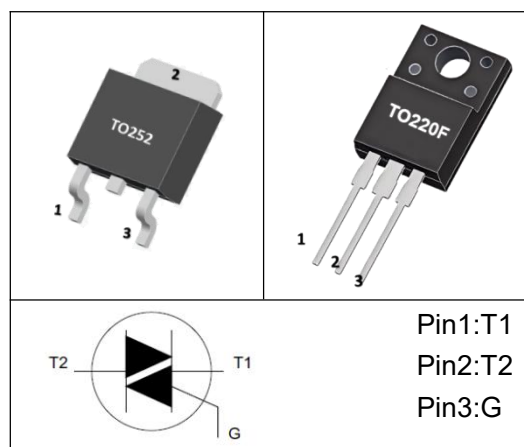


BT136S-800

TRIAC

■ GENERAL DESCRIPTION

Passivated, sensitive gate triacs in a plastic envelope, suitable for surface mounting, intended for use in general purpose bidirectional switching and phase control applications, where high sensitivity is required in all four quadrants.



■ MARKING



BT136S=DeviceCode

800E:VDRM/VRRM=800V

XXXX=Date Code

Solid Dot=Green molding compound

■ ABSOLUTE MAXIMUM RATINGS (TC=25°C, unless otherwise specified)

SYMBOL	PARAMETER		TEST CONDITION	VALUE	UNIT
VDRM	Repetitive Peak off-state voltage	BT136-800	(Tj=25°C)	800	V
IT(RMS)	RMS forward current			4	A
ITSM	Non-repetitive peak on-state current	t=20ms		25	A
		t=16.7ms		27	
I ² t	I ² t for fusing	t=10ms		3.1	A ² S
VGM	Peak gate voltage			5	V
IGM	Peak gate current			2	A
PGM	Peak gate Power			5	W
PG(AV)	Average gate Power			0.5	W
Tj	Junction Temperature			125	°C
Tstg	Storage Temperature Range			-40 to +150	°C

Notes: 1.Absolute maximum ratings are those values beyond which the device could be permanently damaged.

Absolute maximum ratings are stress ratings only and functional device operation is not implied.

2.Although not recommended, off-state voltages up to 800V may be applied without damage, but the traic may switch to the on-state. The rate of rise of current should not exceed 3A/μs.

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■ THERMAL DATA

PARAMETER			SYMBOL	RATINGS	UNIT
Junction to Ambient	Pcb Mounted	TO-252	θ_{JA}	75	K/W
Junction to Mounting Base	Full Cycle		θ_{JB}	3.0	K/W
	Half Cycle			3.7	K/W

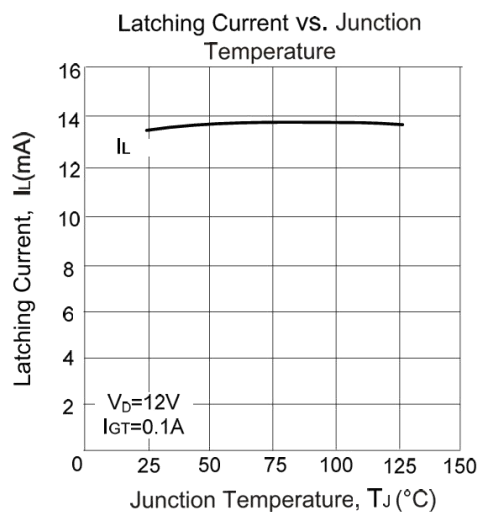
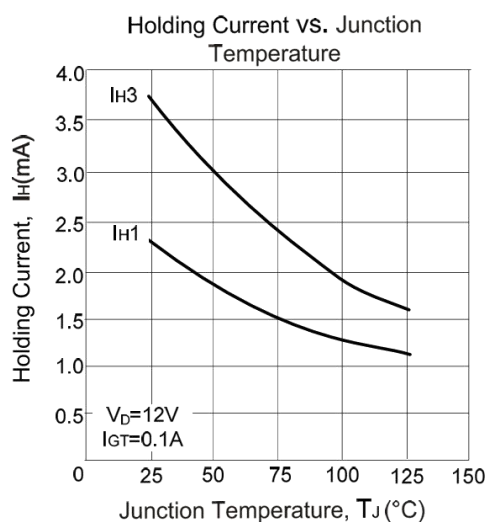
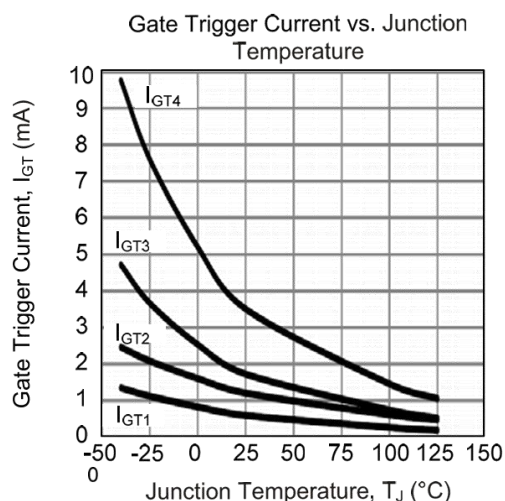
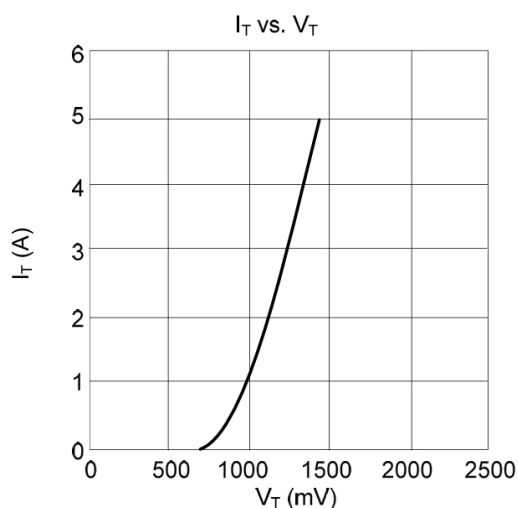
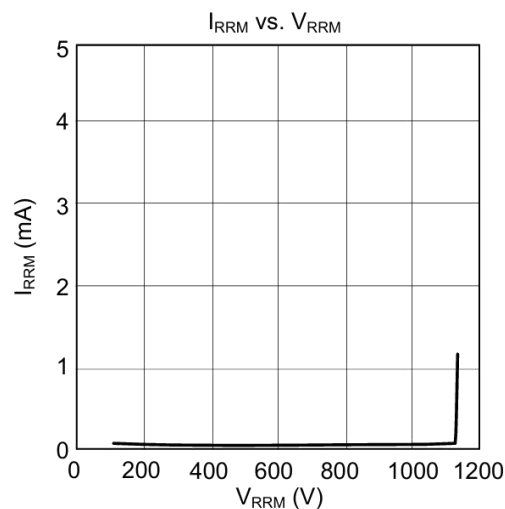
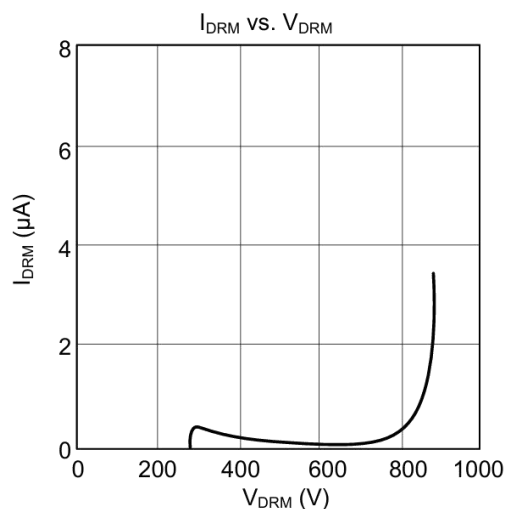
■ ELECTRICAL CHARACTERISTICS (T_J=25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS		MIN	TYP	MAX	UNIT	
STATIC								
Gate trigger current	IGT	VD=12V; IT=0.1A	T2+, G+		2.5	10	mA	
			T2+, G -		4	10		
			T2-, G -		5	10		
			T2-, G+		11	25		
Gate trigger voltage	IL	VD=12V; IGT=0.1A	T2+, G+		3	15	mA	
			T2+, G -		10	20		
			T2-, G -		2.5	15		
			T2-, G+		4	20		
Holding current	IH	VD=12V,IGT=0.1A			2.2	15	mA	
On-State Voltage	VT	IT=5A			1.4	1.7	V	
Gate Trigger Voltage	VGT	VD=12V,IT=0.1A			0.7	1.5	V	
		VD=400V,IT=0.1A;Tj=125℃		0.25	0.4			
Off-state Leakage Current	ID	VD=VDRM(max) ,Tj=125℃			0.1	0.5	mA	
DYNAMIC								
Critical Rate of Rise of off-state Voltage	dVD/dt	VDM=67%VDRM(max),Tj=125° Gate open circuit				50		V/μs
Gate Controlled Turn-on Time	tgt	ITM=6A,VD=VDRM(max) IG=0.1A dIg/dt=5A/μs				2		μs

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TRIAC

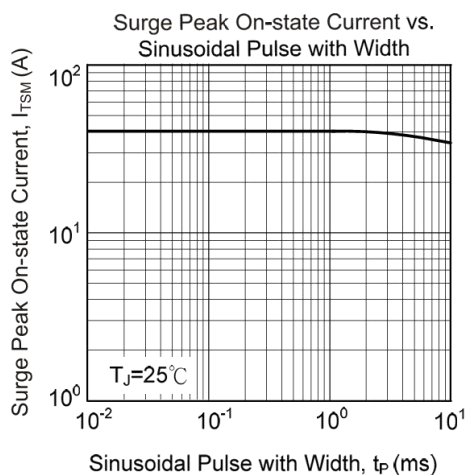
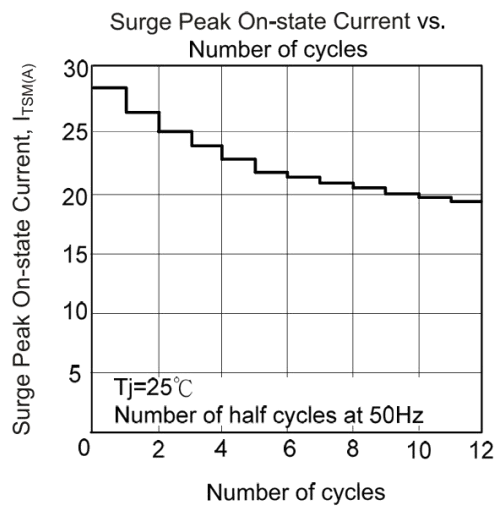
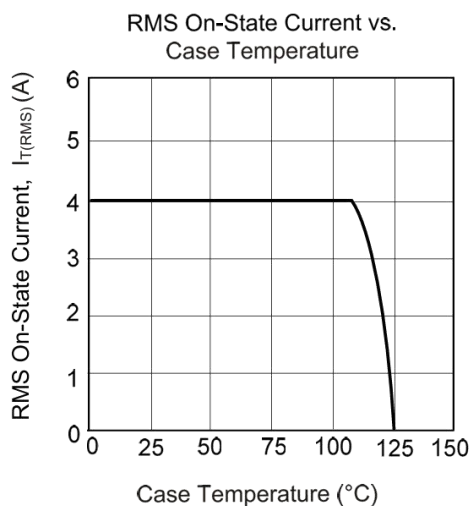
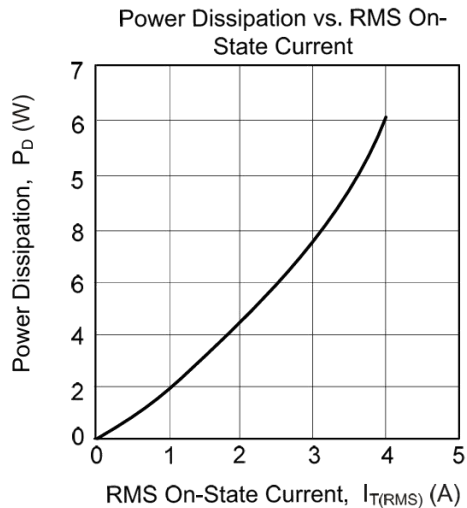
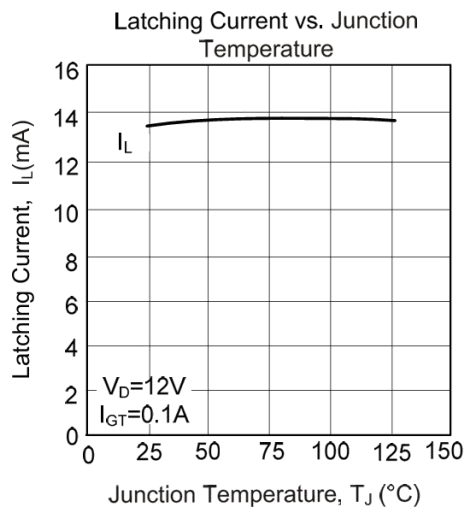
■ TYPICAL CHARACTERISTICS (1)



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TRIAC

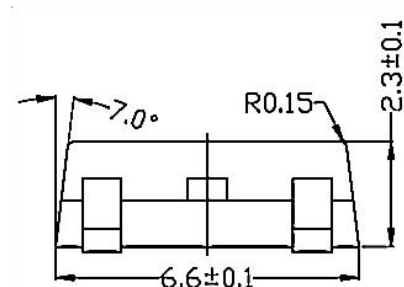
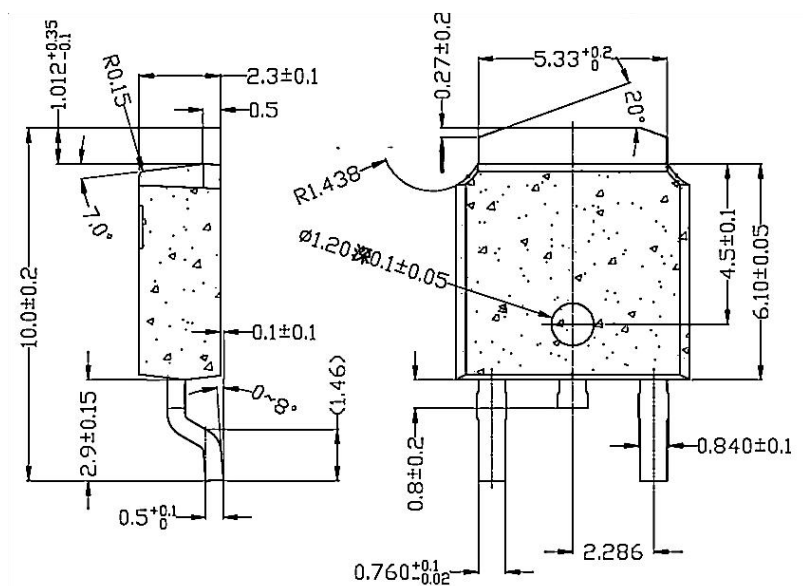
■ TYPICAL CHARACTERISTICS (Con.t)



BT136S-800

TRIAC

TO - 252 PACKAGE OUTLINE DIMENSIONS



TO - 252 PACKING INFORMATION

Package version	Reel dimensions Φ×H (mm)	Per Reel (pcs)	Reels per box	Inner box dimensions L×W×H (mm)	Outer box (pcs)	Outer box dimensions L×W×H (mm)
T0-252	Φ 330*20	2500	2	360*340*50	25000	375*375*280