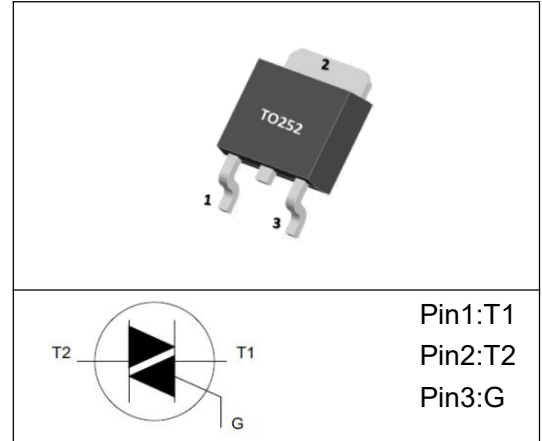


■ GENERAL DESCRIPTION

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.



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

SYMBOL	PARAMETER		TEST CONDITION	VALUE	UNIT
V _{DRM}	Repetitive Peak off-state voltage	BT136	(T _j =25°C)	600	V
I _{T(RMS)}	RMS forward current			4	A
I _{ISM}	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
V _{GM}	Peak gate voltage			5	V
I _{GM}	Peak gate current			2	A
P _{GM}	Peak gate Power			5	W
P _{G(AV)}	Average gate Power			0.5	W
T _j	Junction Temperature			125	°C
T _{stg}	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 triac may switch to the on-state. The rate of rise of current should not exceed 3A/μs.

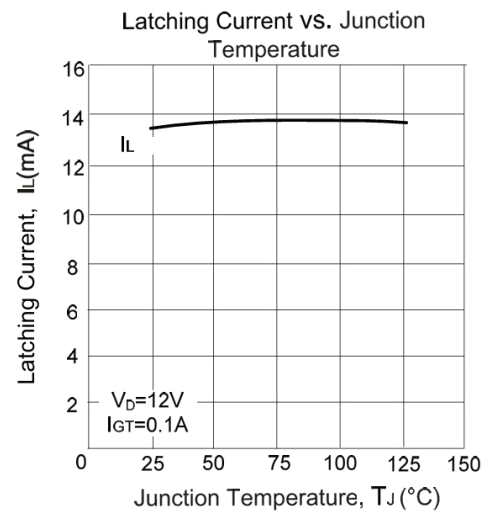
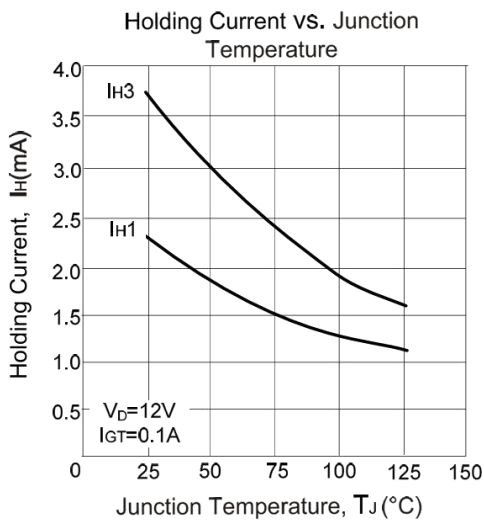
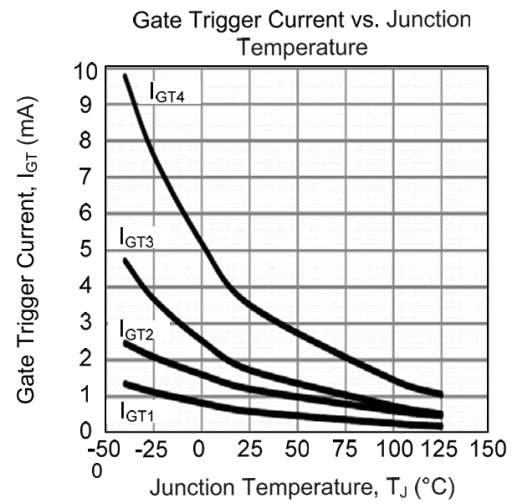
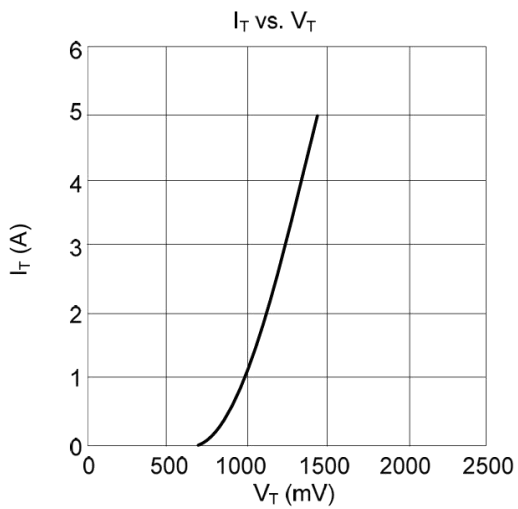
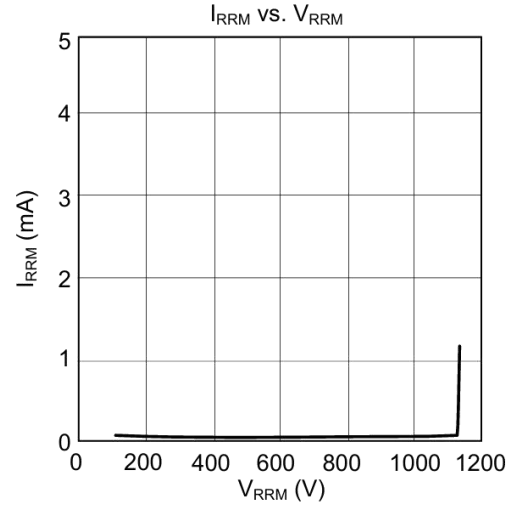
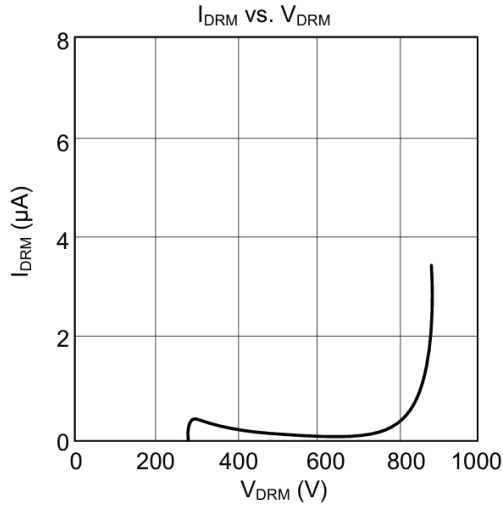
■ THERMAL DATA

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

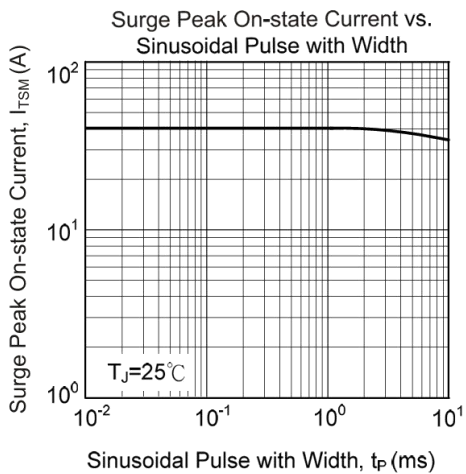
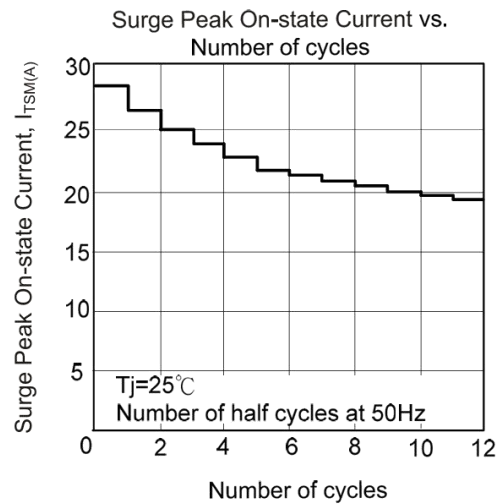
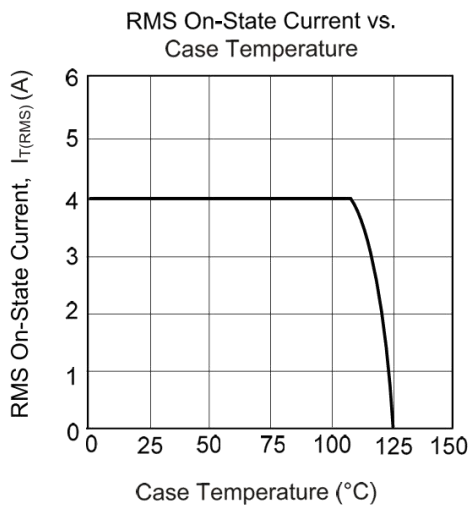
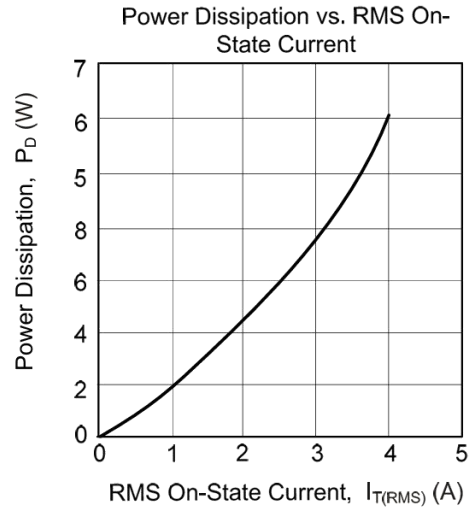
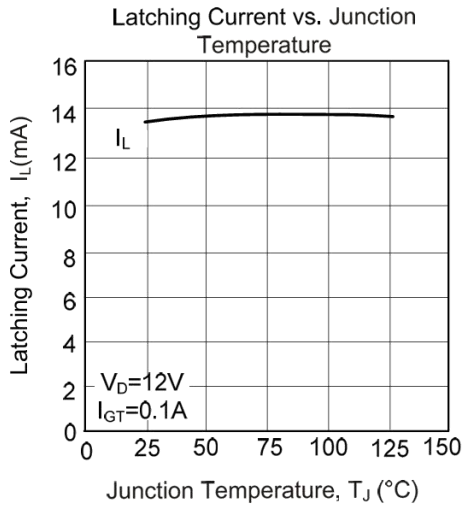
■ ELECTRICAL CHARACTERISTICS (T_J=25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT	
STATIC							
Gate trigger current	I_{GT}	V _D =12V; I _T =0.1A	T2+, G+		2.5	10	mA
			T2+, G-		4	10	
			T2-, G-		5	10	
			T2-, G+		11	25	
Gate trigger voltage	V_L	V _D =12V; I _{GT} =0.1A	T2+, G+		3	15	mA
			T2+, G-		10	20	
			T2-, G-		2.5	15	
			T2-, G+		4	20	
Holding current	I_H	V _D =12V, I _{GT} =0.1A		2.2	15	mA	
On-State Voltage	V_T	I _T =5A		1.4	1.7	V	
Gate Trigger Voltage	V_{GT}	V _D =12V, I _T =0.1A		0.7	1.5	V	
		V _D =400V, I _T =0.1A; T _J =125°C	0.25	0.4			
Off-state Leakage Current	I_D	V _D =V _{DRM(max)} , T _J =125°C		0.1	0.5	mA	
DYNAMIC							
Critical Rate of Rise of off-state Voltage	dV_D/dt	V _{DM} =67%V _{DRM(max)} , T _J =125° Gate open circuit		50		V/μs	
Gate Controlled Turn-on Time	t_{gt}	I _{TM} =6A, V _D =V _{DRM(max)} I _G =0.1A di _G /dt=5A/μs		2		μs	

■ TYPICAL CHARACTERISTICS (1)



■ TYPICAL CHARACTERISTICS (Con.t)



TO - 252 PACKAGE OUTLINE DIMENSIONS

