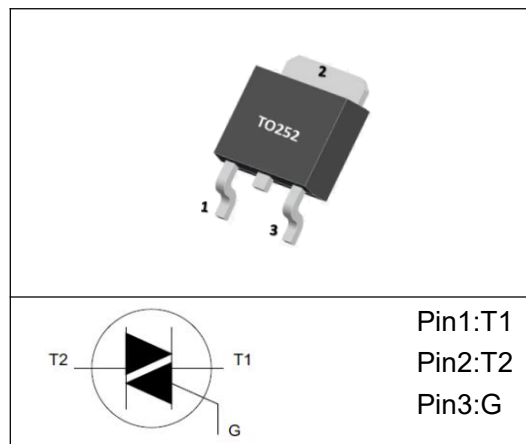




■ GENERAL DESCRIPTION

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	BT136S	(T _j =25 °C)	600	V
I _{T(RMS)}	RMS forward current			4	A
I _{TSM}	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 traic may switch to the on-state. The rate of rise of current should not exceed 3A/μs.



■ THERMAL DATA

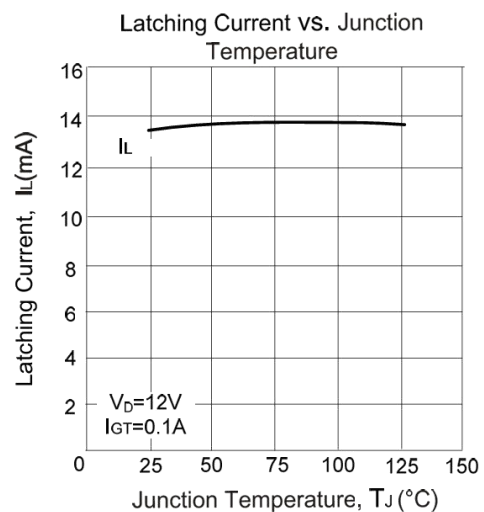
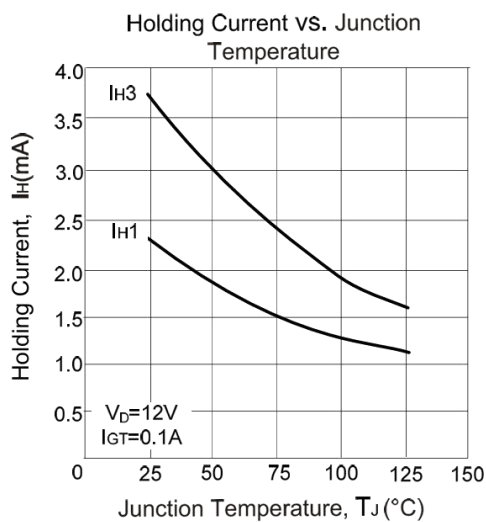
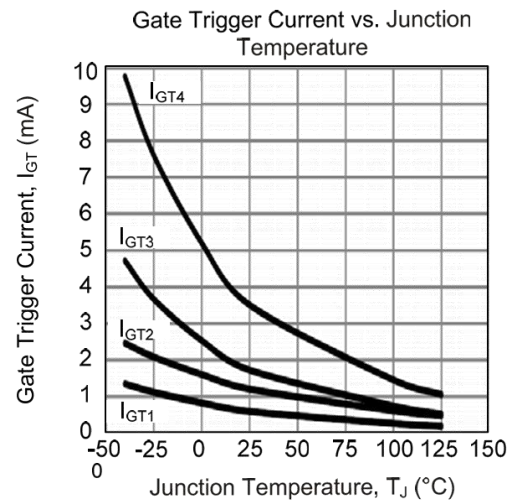
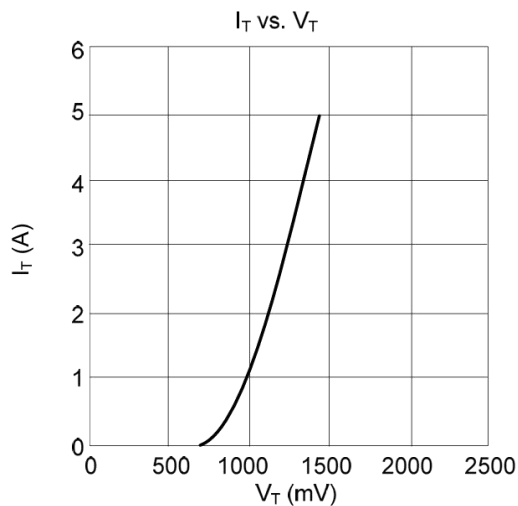
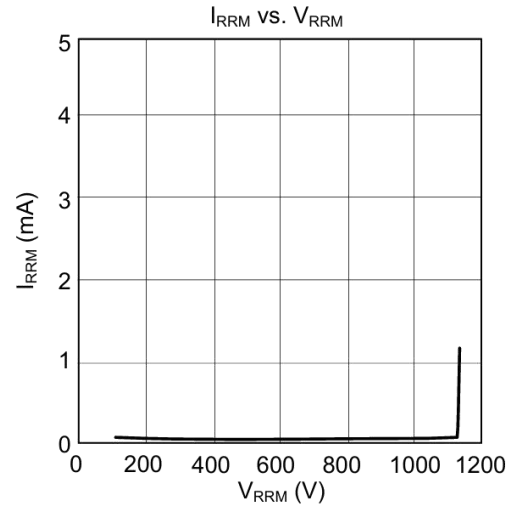
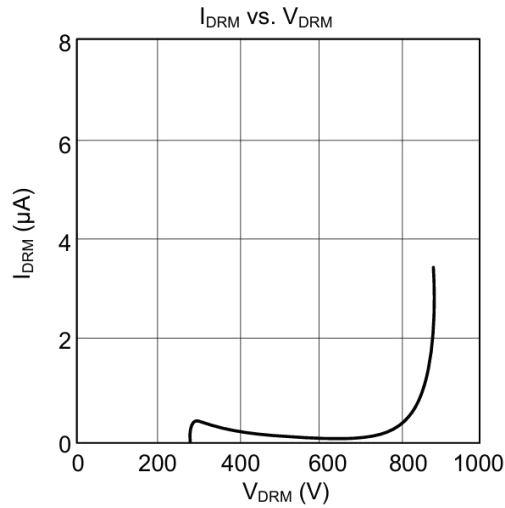
PARAMETER			SYMBOL	RATINGS	UNIT
Junction to Ambient	Pcb Mounted	TO-252	θ_{JA}	75	K/W
Junction to Mounting Base	Full Cycle		θ_{JB}	3.0	K/W
	Half Cycle			3.7	K/W

■ 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	I _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℃		0.25	0.4		
Off-state Leakage Current	I _D	V _D =V _{DRM} (max) ,T _j =125℃			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

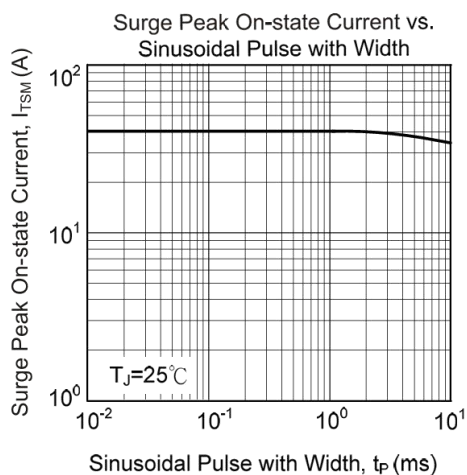
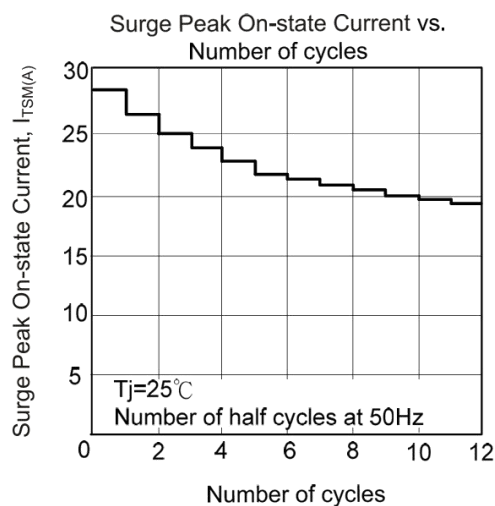
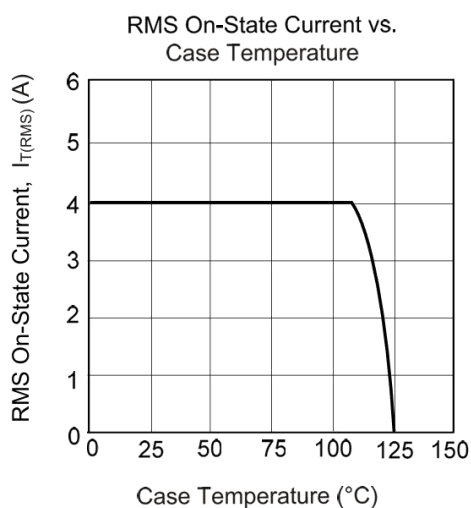
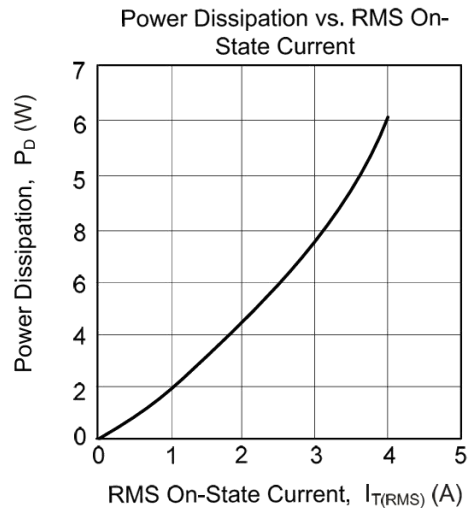
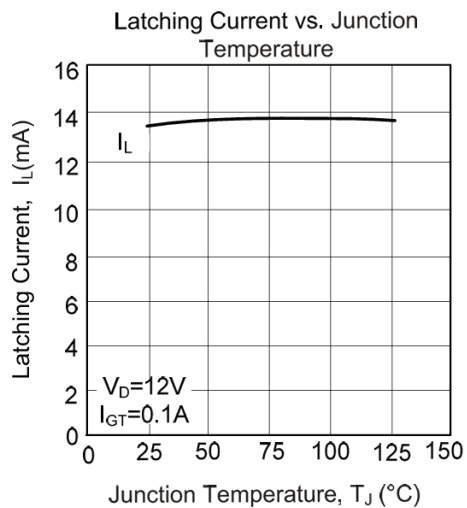


■ TYPICAL CHARACTERISTICS (1)





■ TYPICAL CHARACTERISTICS (Con.t)



■ TO - 252 PACKAGE OUTLINE DIMENSIONS

