

HIGH PERFORMANCE TRIACS

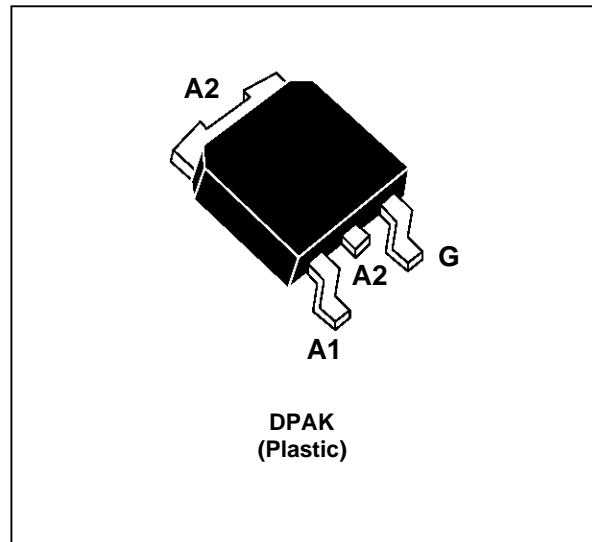
PRELIMINARY DATASHEET

FEATURES

- $I_{TRMS} = 4\text{ A}$
- $V_{DRM} = 400\text{ V to }800\text{ V}$
- $I_{GT} \leq 10\text{ mA and }35\text{ mA}$

DESCRIPTION

The T410/T435-B series of triacs uses a high performance TOPGLASS PNP technology. The parts are intended for general purpose applications using mount technology.



ABSOLUT MAXIMUM RATINGS

Symbol	Parameter		Value	Unit
$I_{T(RMS)}$	RMS on-state current (360° conduction angle)	$T_c = 110\text{ °C}$	4	A
I_{TSM}	Non repetitive surge peak on-state current (T_j initial = 25°C)	$t_p = 8.3\text{ ms}$	35	A
		$t_p = 10\text{ ms}$	30	
I^2t	I^2t value for fusing	$t_p = 10\text{ ms}$	4.5	A ² s
di/dt	Critical rate of rise of on-state current $I_G = 500\text{ mA}$ $di_G/dt = 1\text{ A}/\mu\text{s}$	Repetitive $F = 50\text{ Hz}$	10	A/ μs
		Non Repetitive	50	
T_{stg} T_j	Storage temperature range Operating junction temperature range		- 40 to + 150 - 40 to + 125	°C °C
T_l	Maximum lead temperature for soldering during 10 s		260	°C

Symbol	Parameter	T410 or T435-				Unit
		400B	600B	700B	800B	
V_{DRM} V_{RRM}	Repetitive peak off-state voltage $T_j = 125\text{ °C}$	400	600	700	800	V

T410/T435-B

THERMAL RESISTANCES

Symbol	Parameter	Value	Unit
Rth (j-c)	Junction to case for DC	3.5	°C/W
Rth (j-c)	Junction to case for AC 360° conduction angle (F= 50 Hz)	2.6	°C/W

GATE CHARACTERISTICS (maximum values)

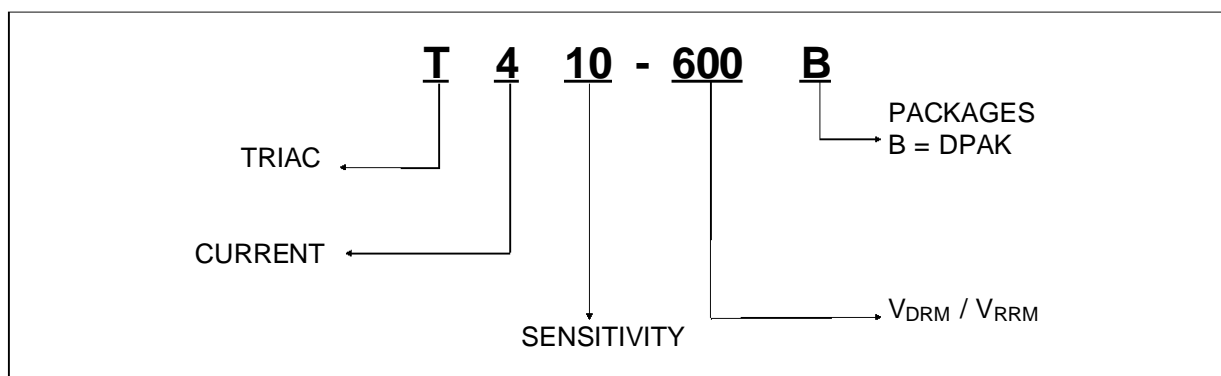
PG(AV) = 1 W PGM= 10 W (tp = 20 μs) IGM = 4 A (tp = 20 μs) VGM = 16 V (tp = 20 μs).

ELECTRICAL CHARACTERISTICS

Symbol	Test Conditions	Quadrant		Value		Unit	
				T410	T435		
IGT	VD=12V (DC) RL=33Ω	Tj=25°C	I-II-III	MAX	10	35	mA
VGT	VD=12V (DC) RL=33Ω	Tj=25°C	I-II-III	MAX	1.5		V
VGD	VD=VDRM RL=3.3kΩ	Tj=125°C	I-II-III	MIN	0.2		V
tgt	VD=VDRM IG = 500mA dIG/dt = 3A/μs ITM = 5.5A	Tj=25°C	I-II-III	TYP	2		μs
IL	IG=1.2 IGT	Tj=25°C	I-II-III	MAX	30	60	mA
IH *	IT= 100mA gate open	Tj=25°C		MAX	15	35	mA
VTM *	ITM= 5.5A tp= 380μs	Tj=25°C		MAX	1.75		V
IDRM IRRM	VDRM Rated VRRM Rated	Tj=25°C		MAX	10		μA
		Tj=125°C		MAX	2		mA
dV/dt *	Linear slope up to VD=67%VDRM gate open	Tj=125°C		MIN	30	250	V/μs
(dI/dt)c *	(dV/dt)c = 0.1V/μs	Tj=125°C		MIN	2.7	4.4	A/ms
	(dV/dt)c = 20V/μs				1.8	2.7	

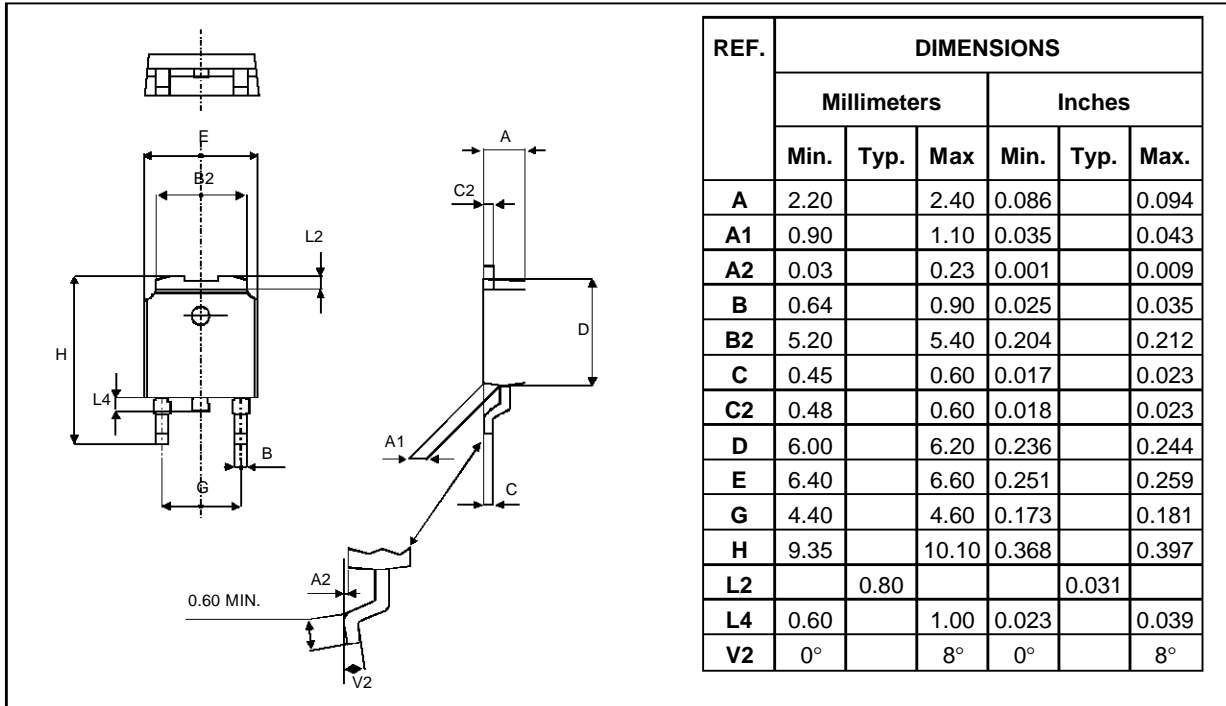
* For either polarity of electrode A2 voltage with reference enceenceto electrode A1.

ORDERING INFORMATION



PACKAGE MECHANICAL DATA

DPAK Plastic



MARKING : Type number

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