

# isc Triacs

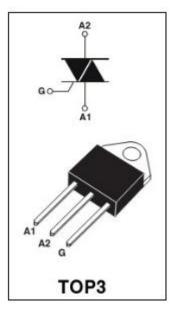
## TPDV840

### FEATURES

- With TOP3 insulated package
- Be suitable for general purpose where high surge current capability is required. Application such as phase control and tatic switching on inductive or resistive load.
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

SYMBOL			Value	UNIT
VDRM	Repetitive peak off-state voltage		800	V
V <sub>RRM</sub>	Repetitive peak reverse voltage		800	V
I <sub>T(RMS)</sub>	RMS on-state current (full sine wa	40	А	
I <sub>TSM</sub>		t <sub>p</sub> =2.5ms	590	А
	Non-repetitive peak on-state current	t <sub>p</sub> =8.3ms	370	
	current	t <sub>p</sub> =10ms	350	
Tj	Operating junction temperature	-40~125	°C	
T <sub>stg</sub>	Storage temperature		-40~150	°C
$P_{G(AV)}$	Average gate power dissipation(T <sub>j</sub> =125 $^{\circ}$ C)		1	W
R <sub>th(j-c)</sub>	Thermal resistance, junction to case		1.2	°C/W
R <sub>th(j-a)</sub>	Thermal resistance, junction to ambient		50	°C/W

#### ABSOLUTE MAXIMUM RATINGS(Ta=25°C)



#### **ELECTRICAL CHARACTERISTICS (Tc=25**<sup>°</sup>C unless otherwise specified)

SYMBOL	PARAMETER	CONDITION	S M	лах	UNIT
I <sub>RRM</sub>	Repetitive peak reverse current	V <sub>R</sub> =V <sub>RRM</sub> , Tj=25 Tj=12	-	0.02 8	mA
I <sub>DRM</sub>	Repetitive peak off-state current	V <sub>R</sub> =V <sub>RRM</sub> , Tj=25 Tj=12		0.02 8	mA
I <sub>GT</sub>	Gate trigger current Quadrant (I-II-III)	V <sub>D</sub> =12V; R <sub>L</sub> = 33 Ω	2	200	mA
$V_{\text{GT}}$	Gate trigger voltage all quadrant Quadrant(I-II-III)	V <sub>D</sub> =12V; R <sub>L</sub> = 33 Ω	1	1.5	V
V <sub>TM</sub>	On-state voltage	$I_{TM}$ = 60A; $t_p$ = 380 $\mu$ s	1	1.8	V

## isc & iscsemi is registered trademark



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