New Jersey Semi-Conductor Products, Inc.

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## Triacs

### FEATURES

- With TO-220 package
- Sensitive Gate Triacs
- Glass Passivated
- Max I<sub>GT</sub> of 5 mA (Quadrants 1~3)

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

SYMBOL	PARAMETER	MIN	UNIT	
V <sub>DRM</sub>	Repetitive peak off-state voltage	600	V	
V <sub>RRM</sub>	Repetitive peak reverse voltage	600	V	
I <sub>T(RMS)</sub>	RMS on-state current (full sine wave)T_C=85 $^\circ\!\!\mathbb{C}$	4	A	
I <sub>TSM</sub>	Non-repetitive peak on-state current	25	A	
Tj	Operating junction temperature	110	°C	
T <sub>stg</sub>	Storage temperature	-45~150	°C	
R <sub>th(j-c)</sub>	Thermal resistance, junction to case	7.8	℃∕W	
R <sub>th(j-a)</sub>	Thermal resistance, junction to ambient	62.5	°C/W	



#### ELECTRICAL CHARACTERISTICS (Tc=25°C unless otherwise specified)

SYMBOL	PARAMETER Repetitive peak off-state current		CONDITIONS	<b>MAX</b> 1.0	UNIT mA
I <sub>DRM</sub>			V <sub>D</sub> =V <sub>DRM</sub> , T <sub>C</sub> =110°C		
I <sub>GT</sub>	Gate trigger current	I	V <sub>supply</sub> = 12 V†; R <sub>L</sub> = 10 Ω; t <sub>p(g)</sub> >20 μ s	5	mA
		II		5	
		III		5	
		IV		10	
I <sub>H</sub>	Holding current		$V_{supply} = 12 V_{\uparrow}, I_G = 0$ initial $I_{TM} = 100 \text{mA}$	30	mA
V <sub>GT</sub>	Gate trigger voltage all quadrant		$V_{supply} = 12 V_{t}^{+}; R_{L} = 10 \Omega; t_{p(g)} > 20 \mu s$	2.0	V
V <sub>TM</sub>	On-state voltage		I <sub>T</sub> = 8.4A; I <sub>G</sub> = 50mA	1.7	V



NJ Semi-Conductors reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However, NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that datasheets are current before placing orders.

## **Quality Semi-Conductors**

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