# New Jersey Semi-Conductor Products, Inc.

20 STERN AVE. SPRINGFIELD, NEW JERSEY 07081 U.S.A. TELEPHONE: (973) 376-2922

(212) 227-6005 FAX: (973) 376-8960

## **Triacs**

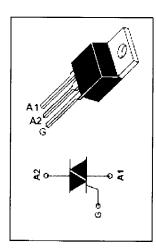
TIC206D

#### **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℃)

SYMBOL	PARAMETER	MIN	UNIT	
$V_{DRM}$	Repetitive peak off-state voltage	400	V	
$V_{RRM}$	Repetitive peak reverse voltage	400	V	
I <sub>T(RMS)</sub>	RMS on-state current (full sine wave)T <sub>C</sub> =85℃	4	Α	
I <sub>TSM</sub>	Non-repetitive peak on-state current	25	Α	
T <sub>j</sub>	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	°C/W	
R <sub>th(j-a)</sub>	Thermal resistance, junction to ambient	62.5	°C/W	



## ELECTRICAL CHARACTERISTICS (T<sub>c</sub>=25℃ unless otherwise specified)

SYMBOL	PARAMETER  Repetitive peak off-state current		CONDITIONS	MAX	UNIT
I <sub>DRM</sub>			V <sub>D</sub> =V <sub>DRM</sub> , T <sub>C</sub> =110°C	1.0	mA
I <sub>GT</sub>	Gate trigger current	Ţ	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		$V_{\text{supply}}$ = 12 V†, $I_{\text{G}}$ = 0 initial $I_{\text{TM}}$ = 100mA	30	mA
V <sub>GT</sub>	Gate trigger voltage all quadrant		$V_{\text{supply}} = 12 \text{ VT}; \text{ R}_{\text{L}} = 10 \Omega; t_{p(g)} > 20 \mu \text{ s}$	2.0	V
$V_{TM}$	On-state voltage		I <sub>T</sub> = 8.4A; I <sub>G</sub> = 50mA	1.7	V



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