



ELECTRONICS, INC.  
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**NTE5699**  
**TRIAC – 800V<sub>RM</sub>, 25A**  
**TO220 Full Pack**

**Features:**

- Off-State Voltages to 800 Volts
- Gate Triggering Guaranteed in Four Modes

**Absolute Maximum Ratings:** ( $T_A = +25^\circ\text{C}$  unless otherwise specified)

Repetitive Peak Off-State Voltage, $V_{DRM}$ .....	800V
Repetitive Peak Reverse Voltage, $V_{RRM}$ .....	800V
RMS On-State Current (Full Sine Wave, $T_J = +80^\circ\text{C}$ ), $I_{T(RMS)}$ .....	25A
Non-Repetitive Peak On-State Current ( $t_p = 8.3\text{ms}$ ), $I_{TSM}$ .....	250A
Operating Junction Temperature Range, $T_J$ .....	$-40^\circ$ to $+125^\circ\text{C}$
Storage Temperature Range, $T_{stg}$ .....	$-40^\circ$ to $+150^\circ\text{C}$
Thermal Resistance, Junction-to-Case, $R_{thJC}$ .....	$1.2^\circ\text{C/W}$

**Electrical Characteristics:** ( $T_C = +25^\circ\text{C}$  unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit	
Repetitive Peak Reverse Current	$I_{RRM}$	$V_R = V_{RRM}$		-	-	0.01	mA
			$T_J = +125^\circ\text{C}$	-	-	2.0	mA
Repetitive Peak Off-State Current	$I_{DRM}$	$V_D = V_{RRM}$		-	-	0.01	mA
			$T_J = +125^\circ\text{C}$	-	-	2.0	mA
Gate Trigger Current	$I_{GT}$	$V_D = 12\text{V}, R_L = 30\Omega$		-	-	50	mA
I			-	-	50	mA	
II			-	-	50	mA	
IV			-	-	75	mA	
Holding Current	$I_H$	$I_{GT} = 0.1\text{A}, \text{Gate Open}$	-	-	50	mA	
Gate Trigger Voltage, All Quadrants	$V_{GT}$	$V_D = 12\text{V}, R_L = 30\Omega$	-	-	2	V	
On-State Voltage	$V_{TM}$	$I_T = 35\text{A}, t_p 2\text{ms}$	-	-	1.85	V	

Rev. 12-19



