

## Triacs

### Bidirectional Triode Thyristors

... designed primarily for industrial and military applications for the fullwave control of ac loads in applications such as light dimmers, power supplies, heating controls, motor controls, welding equipment and power switching systems.

- All Diffused and Glass Passivated Junctions for Greater Stability
- Pressfit, Stud and Isolated Stud Packages
- Gate Triggering Guaranteed In All 4 Quadrants

**2N5567  
 thru  
 2N5570  
 T4101M  
 T4111M  
 T4121  
 Series**

**TRIACS  
 10 AMPERES RMS  
 200 thru 600 VOLTS**



#### MAXIMUM RATINGS

Rating	Symbol	Value	Unit
*Peak Repetitive Off-State Voltage ( $T_J = -65$ to $+100^\circ\text{C}$ ) 1/2 Sine Wave 50 to 60 Hz, Gate Open 2N5567, 2N5569, T4121B 2N5568, 2N5570, T4121D T4101M, T4111M, T4121M	$V_{DRM}$	200 400 600	Volts
*Peak Gate Voltage	$V_{GM}$	20	Volts
*RMS On-State Current ( $T_C = -65$ to $+85^\circ\text{C}$ ) ( $T_C = +90^\circ\text{C}$ ) Full cycle, Sine Wave, 50 to 60 Hz	$I_{T(RMS)}$	10 6.7	Amps
*Peak Non-Repetitive Surge Current (One Full cycle of surge current at 60 Hz, preceded and followed by rated current, $T_C = 85^\circ\text{C}$ )	$I_{TSM}$	100	Amps
Circuit Fusing Considerations ( $T_C = -65$ to $+85^\circ\text{C}$ , $t = 1$ to 8.3 ms)	$i^2t$	40	$\text{A}^2\text{s}$
Peak Gate Power ( $T_C = 85^\circ\text{C}$ , Pulse Width = $1 \mu\text{s}$ )	$P_{GM}$	16	Watts
*Average Gate Power ( $T_C = 85^\circ\text{C}$ , Pulse Width = 8.3 ms)	$P_{G(AV)}$	0.5	Watt
*Operating Junction Temperature Range	$T_J$	$-65$ to $+100$	$^\circ\text{C}$
*Storage Temperature Range	$T_{stg}$	$-65$ to $+150$	$^\circ\text{C}$
Stud Torque	—	30	in. lb.

#### THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
*Thermal Resistance, Junction to Case Stud and Pressfit Isolated Stud	$R_{\theta JC}$	1 1.1	$^\circ\text{C/W}$

\*Indicates JEDEC Registered Data.



CASE 174-04

2N5567 2N5567  
 2N5568 2N5568  
 2N5568 T4101M



CASE 175-02

2N5569  
 2N5570  
 T4111M



CASE 235-02  
 T4121 SERIES

