



4A TRIACS

Z0409MF

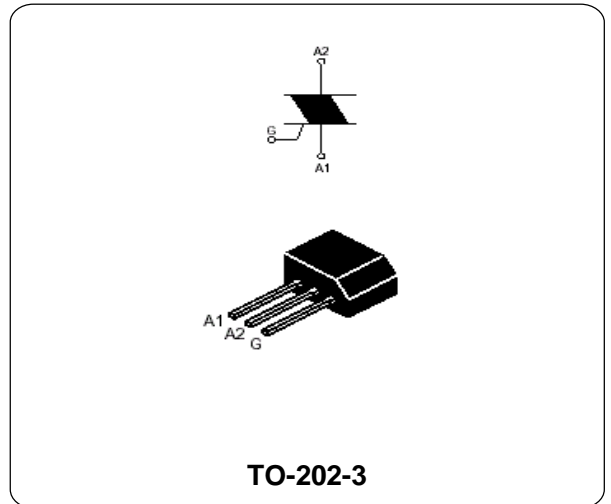
GENERAL DESCRIPTION

The Z0409MF is suitable for general purpose AC switching applications. They can be found in applications such as touch light dimmers, fan controllers, HID lamp ignitors,...

Different gate current sensitivities are available, allowing optimized performances when controlled directly from microcontrollers.

ABSOLUTE MAXIMUM RATINGS (Ta = 25 °C)

Parameter	Symbol	Typ	Unit
Repetitive peak off-state voltages	V_{DRM} V_{RRM}	600	V
RMS on-state current	$I_{T(RMS)}$	4.0	A
Non-repetitive peak on-state current	I_{TSM}	25	A
Max. Operating Junction Temperature	T_j	110	°C
Storage Temperature	T_{stg}	-45~150	°C



ELECTRICAL CHARACTERISTICS (Ta = 25 °C)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Repetitive peak off-state voltages	V_{DRM} V_{RRM}		—	600	—	V
RMS on-state current	$I_{T(RMS)}$	full sine wave; $T_{mb} \leq 107$ °C	—	4	—	A
On-state voltage	V_T	$I_T=5.5A, t_p = 380$ us	—	1.4	2.0	V
Holding current	I_H	$V_D = 12$ V; $I_T = 50$ mA	—	—	10	mA
Gate trigger current	T2+G+	$V_D = 12$ V; $I_T = 0.4$ A	—	2.5	10	mA
	T2+G-		—	4.0	10	
	T2-G-		—	5.0	10	
	T2-G+		—	8.0	10	
Latching current	T2+G+	$I_G=1.2 I_{GT}$	—	3.0	15	mA
	T2+G-		—	10	25	
	T2-G-		—	2.5	15	
	T2-G+		—	4.0	15	
Gate trigger voltage	V_{GT}	$V_D = 12$ V; $I_T = 0.4$ A	—	0.7	1.3	V