

TRIAC

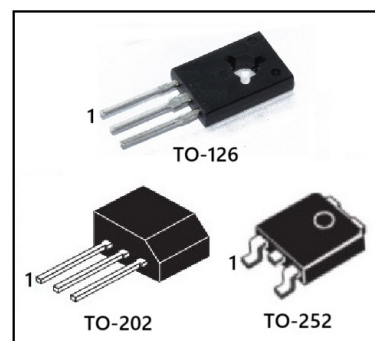
Z0409

FEATURES

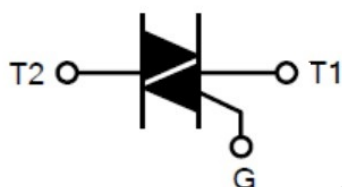
This device of sensitive TRIAC product is a glass passivated device, has a low gate trigger current, high stability in gate trigger current to variation of operating temperature and high off state voltage.

APPLICATIONS

This device is suitable for low power AC switching application, phase control application such as fan speed and temperature modulation control, lighting control and static switching relay.



SYMBOL:



Package	Pin assignment		
	1	2	3
TO-126	T1	T2	G
TO-202	T1	T2	G
TO-252	T1	T2	G

ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	VALUE		UNIT
Repetitive Peak Off-State Voltages	V_{DRM}, V_{RRM}	Z0409-600	600	V
		Z0409-800	800	
RMS on-State Current	$I_{T(RMS)}$	4		A
Non-Repetitive Peak On-State Current	I_{TSM}	25		A
I^2t for fusing	I^2t	2.2		A ² s
Repetitive rate of rise of on-state current after triggering	dI_T/dt	I	20	A/ μ S
		II	20	
		III	20	
		IV	10	
Peak gate current	I_{GM}	1.2		A
Peak Gate Power	P_{GM}	5		W
Average Gate Power	$P_{G(AV)}$	0.2		W
Operating junction temperature	T_J	-40~+125		°C
Storage Temperature	T_{STG}	-40 ~ +150		°C

ELECTRICAL CHARACTERISTICS (TJ=25°C)

PARAMETER	SYMBOL	TEST CONDITIONS		MIN	MAX	UNITS
Peak Repetitive Forward or Reverse Blocking Current	I_{DRM} I_{RRM}	$V_{AK} = \text{Rated } V_{DRM} \text{ or } V_{RRM};$			5	uA
Gate Trigger Current	I_{GT}	$V_D=12V,$ $R_L=33\Omega$	I		10	mA
			II		10	
			III		10	
			IV		30	
Gate Trigger Voltage	V_{GT}	$V_D=12V, R_L=33\Omega$			1.3	V
Peak Forward On-State Voltage	V_{TM}	$I_T=5.0A,$			1.7	V
Latch Current	I_L	$I_G=1.2I_{GT}$	I		15	mA
			II		25	
			III		15	
			IV		15	
Holding Current	I_H	$I_T=0.1A$			10	mA
Gate Non-Trigger Voltage	V_{GD}	$V_D=V_{DRM}$		0.2		V
Critical Rate of Rise of Off-State Voltage	dV/dt	$V_D=67\%V_{DRM}, R_{GK}=1k\Omega,$		100		V/ μs