

# TRIAC (ISOLATED TYPE)

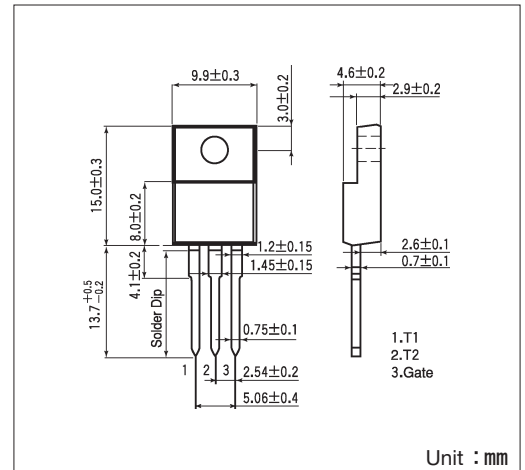
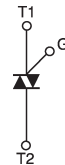
# TMG10C40/60F



UL;E76102 (M)

TMG10C40/60F are isolated mold triac suitable for wide range of applications like copier, microwave oven, solid state switch, motor control, light and heater control.

- I<sub>T</sub>(RMS) 10A
- High surge capability 110A
- Full molded isolated type
- Three types of lead forming



## Maximum Ratings

(T<sub>j</sub>=25 °C unless otherwise specified)

Symbol	Item	Ratings		Unit
		TMG10C40F	TMG10C60F	
V <sub>DRM</sub>	Repetitive Peak Off-State Voltage	400	600	V

Symbol	Item	Conditions	Ratings	Unit
I <sub>T</sub> (RMS)	R.M.S. On-State Current	T <sub>c</sub> =83 °C	10	A
I <sub>TSM</sub>	Surge On-State Current	One cycle, 50Hz/60Hz, peak, non-repetitive	100/110	A
I <sup>2</sup> t	I <sup>2</sup> t		50	A <sup>2</sup> S
P <sub>GM</sub>	Peak Gate Power Dissipation		5	W
P <sub>G(AV)</sub>	Average Gate Power Dissipation		0.5	W
I <sub>GM</sub>	Peak Gate Current		2	A
V <sub>GM</sub>	Peak Gate Voltage		10	V
V <sub>ISO</sub>	Isolation Breakdown Voltage (R.M.S.)	A.C.1 minute	1500	V
T <sub>j</sub>	Operating Junction Temperature		-40 ~ +125	°C
T <sub>stg</sub>	Storage Temperature		-40 ~ +125	°C
	Mass		2	g

## Electrical Characteristics

Symbol	Item	Conditions	Ratings			Unit
			Min.	Typ.	Max.	
I <sub>DRM</sub>	Reptitive Peak Off-State Current	V <sub>D</sub> =V <sub>DRM</sub> , Single phase, half wave, T <sub>j</sub> =125 °C			2	mA
V <sub>TM</sub>	Peak On-State Voltage	I <sub>T</sub> =15A, Inst. measurement			1.4	V
I <sub>GT1</sub> <sup>+</sup>	Gate Trigger Current	V <sub>D</sub> =6V, R <sub>L</sub> =10 Ω			30	mA
I <sub>GT1</sub> <sup>-</sup>					30	
I <sub>GT3</sub> <sup>+</sup>					—	
I <sub>GT3</sub> <sup>-</sup>					30	
V <sub>GT1</sub> <sup>+</sup>	Gate Trigger Voltage	V <sub>D</sub> =6V, R <sub>L</sub> =10 Ω			1.5	V
V <sub>GT1</sub> <sup>-</sup>					1.5	
V <sub>GT3</sub> <sup>+</sup>					—	
V <sub>GT3</sub> <sup>-</sup>					1.5	
V <sub>GD</sub>	Non-Trigger Gate Voltage	T <sub>j</sub> =125 °C, V <sub>D</sub> =1/2 V <sub>DRM</sub>	0.2			V
(dv/dt) <sub>c</sub>	Critical Rate of Rise off-State Voltage at commutation	T <sub>j</sub> =125 °C, (di/dt) <sub>c</sub> =-5A/ms, V <sub>D</sub> =2/3 V <sub>DRM</sub>	10			V/μs
I <sub>H</sub>	Holding Current			20		mA
R <sub>th(j-c)</sub>	Thermal Impedance	Junction to case			3.5	°C/W

