

TRIAC (NON-ISOLATED TYPE) TO-3P PACKAGE

TMG40C60

 $I_{T(RMS)}=40A$, $V_{DRM}=600V$

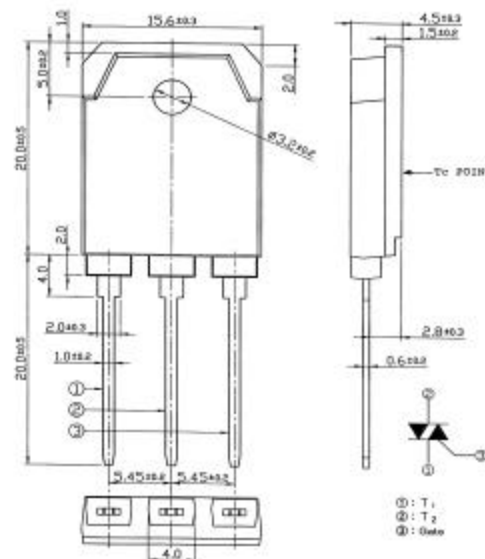
SanRex Triac **TMG40C60** is designed for full-wave AC control applications. It can be used as an ON/OFF function or for phase control operations.

Features

- * Glass-passivated junctions
- * High Surge Current

Typical Applications

- * Heater Control
- * Motor Control
- * Lighting Control
- * Power Supplies



< Maximum Ratings >

(T_j = 25°C Unless Otherwise Specified)

Symbol	Item	Conditions	Ratings	Unit
V_{DRM}	Repetitive Peak Off-State Voltage		600	V
$I_{T(RMS)}$	R.M.S. On-state Current	T _c = 71°C	40	A
I_{TSM}	Surge On-state Current	One cycle, 60Hz, peak value, non-repetitive	330	A
I^2t	I^2t (for fusing)		450	A ² s
P_{GM}	Peak Gate Power Dissipation		5	W
$P_{G(AV)}$	Average Gate Power Dissipation		0.5	W
I_{GM}	Peak Gate Current		2	A
V_{GM}	Peak Gate Voltage		10	V
T_j	Operation Junction Temperature		-40 to +125	°C
T_{stg}	Storage Temperature		-40 to +125	°C
	Mass		6.2	g

< Electrical Characteristics >

(T_j = 25°C Unless Otherwise Specified)

Symbol	Item		Conditions	Ratings			Unit
				Min.	Typ.	Max.	
I _{DRM}	Repetitive Peak Off-state Current		V _D = V _{DRM} , T _J = 125°C, Single phase, half wave			5	mA
V _{TM}	Peak On-state Voltage		I _T = 56A, Inst. Measurement			1.85	V
I _{GT1} ⁺	QI	Gate Trigger Current	V _D = 6V, R _L = 10Ω			50	mA
I _{GT1} ⁻	QII					50	
I _{GT3} ⁺	QIV			-	-	-	
I _{GT3} ⁻	QIII					50	
V _{GT1} ⁺	QI	Gate Trigger Voltage				2	V
V _{GT1} ⁻	QII					2	
V _{GT3} ⁺	QIV			-	-	-	
V _{GT3} ⁻	QIII					2	
V _{GD}	Non-trigger Gate Voltage		T _J = 125°C, V _D =1/2V _{DRM}	0.2			V
(dv/dt) _c	Critical Rate of Rise of Off-State Voltage at Commutation		T _J = 125°C, V _D =2/3V _{DRM} (di/dt) _c =-12.5A/ms	6			V/Fs
I _H	Holding Current				35		mA
R _{th(j-c)}	Thermal Resistance		Junction to case			1	°C/W