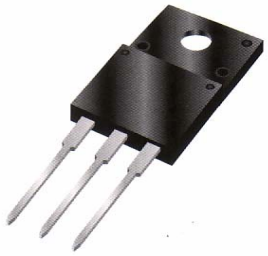
SanRex®

TRIAC

TMG40C60J

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

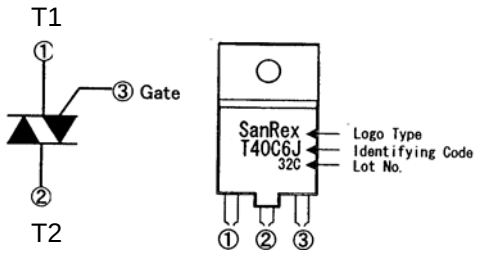
SanRex Triac **TMG40C60J** is designed for full wave AC control applications. It can be used as an ON/OFF function or for phase control operation. **TMG40C60J** has an isolated diffusion type die with glass-passivated junctions. It achieves very high reliability and keeping stable design criteria.



Isolated TO-3PF Package

Features

* Glass-passivated junctions features
* High surge Current
* Low voltage drop
* Lead-free solder plated terminals
* UL registered E76102



Internal schematic diagram

Typical Applications

* Home Appliances
* Heater Controls
* Lighting Controls
* Temperature Controls

< Maximum Ratings> (Tj = 25°C unless otherwise noted)

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 = 73°C	40	A
I_{TSM}	Surge On-state Current	One cycle, 60Hz, Peak, non-repetitive	420	A
I^2t	I^2t (for fusing)	Value for one cycle surge current	730	A^2s
P_{GM}	Peak Gate Power Dissipation		10	W
$P_{G(AV)}$	Average Gate Power Dissipation		1	W
I_{GM}	Peak Gate Current		3	A
V_{GM}	Peak Gate Voltage		10	V
Viso	Isolation Voltage	A.C. 1 minuite	1500	V
Tj	Operation Junction Temperature		-40 to +125	°C
T_{stg}	Storage Temperature		-40 to +150	°C
	Mass	Typical Value	5.6	g

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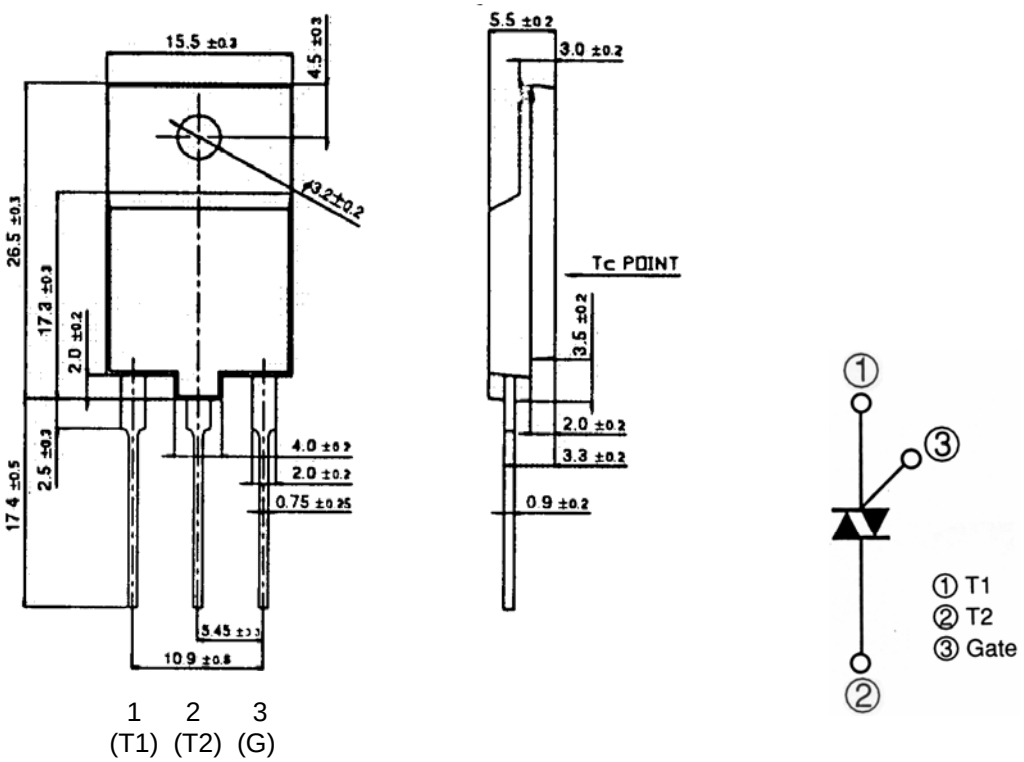
< Electrical Characteristics > (Tj= 25°C unless otherwise noted)

Symbol	Item		Conditions	Ratings			Unit
				Min.	Typ.	Max.	
I_{DRM}	Repetitive Peak Off-state Current		T_j = 125°C, $V_D = V_{DRM}$, Single Phase, Half wave			5	mA
V_{TM}	Peak On-State Voltage		I_T =60A, Instant measurement			1.4	V
$I_{GT}1^+$	QI	Gate Trigger Current	V_D = 6V, I_T = 1A			50	mA
$I_{GT}1^-$	QII					50	mA
$I_{GT}3^+$	QIV					-	mA
$I_{GT}3^-$	QIII					50	mA
$V_{GT}1^+$	QI	Gate Trigger Voltage	V_D = 6V, I_T = 1A			1.5	V
$V_{GT}1^-$	QII					1.5	V
$V_{GT}3^+$	QIV					-	V
$V_{GT}3^-$	QIII					1.5	V
V_{GD}	Non-Trigger Gate Voltage		Tj = 125°C, V_D=1/2V_{DRM}	0.2			V
(dv/dt)c	Critical Rate of Rise of Commutation Voltage		Tj = 125°C, V_D=2/3V_{DRM}, (di/dt)c=-20A/ms	10			V/Fs
I_H	Holding Current				30		mA
Rth(j-c)	Thermal Resistance		Junction to case			1.1	°C/W



* Dimensions in millimeters (1mm=0.0394")