

TRIAC

TMG40C80L

$I_{T(RMS)}=40A, V_{DRM}=800V$

SanRex Triac **TMG40C80L** is designed for full wave AC control applications. It can be used as an ON/OFF function or for phase control operation. **TMG40C80L** has an isolated diffusion type die with glass-passivated junctions. It achieves very high reliability and keeping stable design criteria.

Features

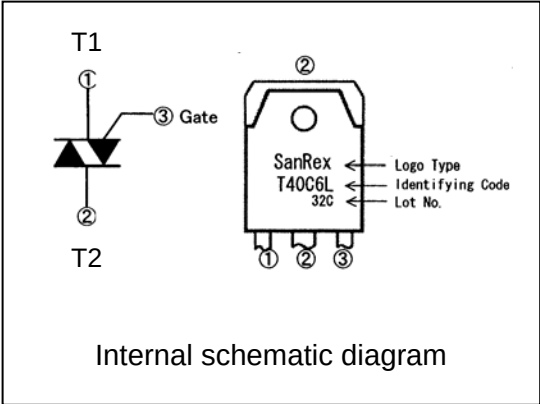
- * Glass-passivated junctions features
- * High surge Current
- * Low voltage drop
- * Low thermal resistance

Typical Applications

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



Non-isolated TO-3P Package



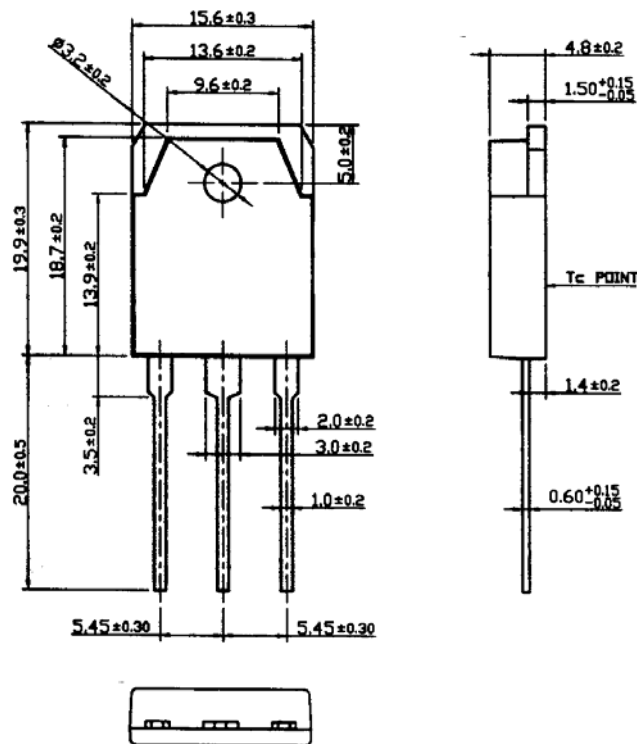
Internal schematic diagram

< Maximum Ratings>			(Tj = 25°C unless otherwise noted)	
Symbol	Item	Conditions	Ratings	Unit
V_{DRM}	Repetitive Peak Off-state Voltage		800	V
$I_{T(RMS)}$	R.M.S. On-state Current	$T_c = 97^{\circ}C$	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	$A^2 s$
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
T_j	Operation Junction Temperature		-40 to +125	°C
T_{stg}	Storage Temperature		-40 to +150	°C
	Mass	Typical Value	5.1	g

< Electrical Characteristics >

(T_j = 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 _{GT1} ⁺	Gate Trigger Current	V _D = 6V, R _L = 10Ω			50	mA
I _{GT1} ⁻					50	mA
I _{GT3} ⁺					-	mA
I _{GT3} ⁻					50	mA
V _{GT1} ⁺	Gate Trigger Voltage	V _D = 6V, R _L = 10Ω			1.5	V
V _{GT1} ⁻					1.5	V
V _{GT3} ⁺					-	V
V _{GT3} ⁻					1.5	V
V _{GD}	Non-Trigger Gate Voltage	T _j = 125°C, V _D = 1/2 V _{DRM}	0.2			V
(dv/dt) _c	Critical Rate of Rise of Commutation Voltage	T _j = 125°C, V _D = 2/3 V _{DRM} , (di/dt) _c = -20A/ms	10			V/Fs
I _H	Holding Current			30		mA
R _{th(j-c)}	Thermal Resistance	Junction to case			0.6	°C/W



* Dimensions in millimeters (1mm=0.0394")