

TRIAC

TMG40C80L

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

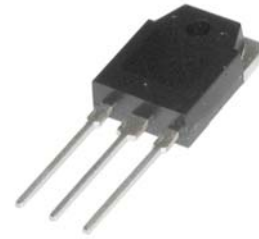
SanRex Triac **TMG40C80L** is designed for full wave AC control applications. It can be used as an ON/OFF function or for phase control operation. **TMG40C80L** has an isolated diffusion type die with glass-passivated junctions. It achieves very high reliability and keeping stable design criteria.

Features

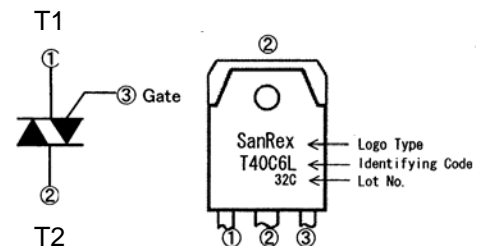
- * Glass-passivated junctions features
- * High surge Current
- * Low voltage drop
- * Low thermal resistance

Typical Applications

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



Non-isolated TO-3P Package



Internal schematic diagram

< Maximum Ratings >

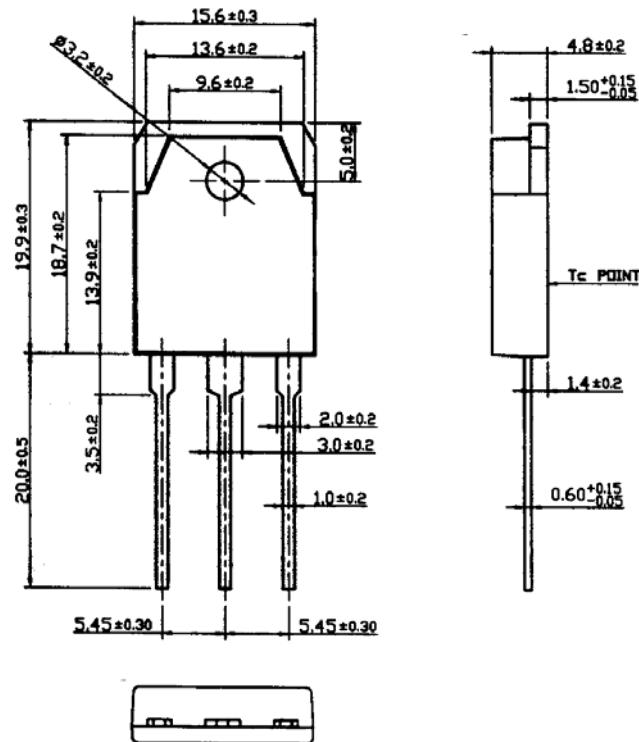
(T_j = 25°C unless otherwise noted)

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°C	40	A
I _{TSM}	Surge On-state Current	One cycle, 60Hz, Peak, non-repetitive	420	A
I ² t	I ² t (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+}	QI	V _D = 6V, R _L = 10Ω			50	mA
I _{GT1-}	QII				50	mA
I _{GT3+}	QIV				-	mA
I _{GT3-}	QIII				50	mA
V _{GT1+}	QI	V _D = 6V, R _L = 10Ω			1.5	V
V _{GT1-}	QII				1.5	V
V _{GT3+}	QIV				-	V
V _{GT3-}	QIII				1.5	V
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 Commutation Voltage	T _j = 125°C, V _D = 2/3V _{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")