

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

# TMG25C60

$I_{T(RMS)}=25A$ ,  $V_{DRM}=600V$

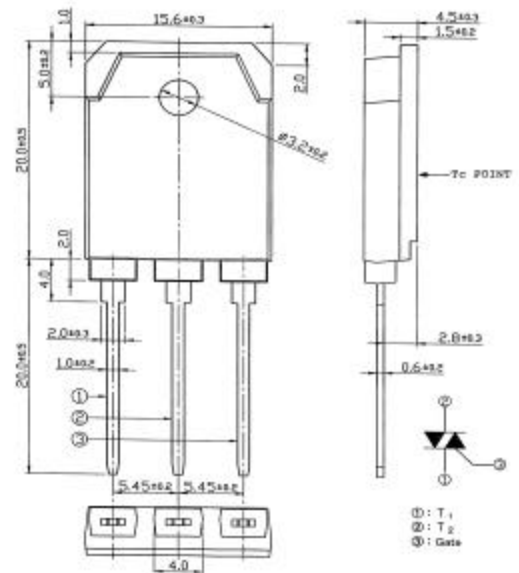
SanRex Triac **TMG25C60** is designed for full-wave AC control applications. It can be used as an ON/OFF function or for phase control operations.

### Features

- \* Glass-passivated junctions
- \* High Surge Current

### Typical Applications

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



### < Maximum Ratings >

(T<sub>j</sub> = 25°C Unless Otherwise Specified)

Symbol	Item	Conditions	Ratings	Unit
V <sub>DRM</sub>	Repetitive Peak Off-state Voltage		600	V
I <sub>T(RMS)</sub>	R.M.S. On-state Current	T <sub>c</sub> = 86°C	25	A
I <sub>TSM</sub>	Surge On-state Current	One cycle, 50/60Hz, peak value, non-repetitive	225/250	A
I <sup>2</sup> t	I <sup>2</sup> t (for fusing)	Value for one cycle of surge current	260	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
T <sub>j</sub>	Operation Junction Temperature		-40 to+125	°C
T <sub>stg</sub>	Storage Temperature		-40 to+125	°C
	Mass		6.2	g

### < Electrical Characteristics >

(T<sub>j</sub> = 25°C Unless Otherwise Specified)

Symbol	Item	Conditions	Ratings			Unit
			Min.	Typ.	Max.	
I <sub>DRM</sub>	Repetitive Peak Off-state Current	V <sub>D</sub> = V <sub>DRM</sub> , T <sub>j</sub> = 125°C, Single phase, half wave			5	mA
V <sub>TM</sub>	Peak On-state Voltage	I <sub>T</sub> = 35A, Inst. Measurement			1.4	V
I <sub>GT1+</sub>	QI	V <sub>D</sub> = 6V, R <sub>L</sub> = 10Ω			30	mA
I <sub>GT1-</sub>	QII				30	
I <sub>GT3+</sub>	QIV				-	
I <sub>GT3-</sub>	QIII				30	
V <sub>GT1+</sub>	QI				1.5	V
V <sub>GT1-</sub>	QII				1.5	
V <sub>GT3+</sub>	QIV				-	
V <sub>GT3-</sub>	QIII				1.5	
V <sub>GD</sub>	Non-trigger Gate Voltage	T <sub>j</sub> = 125°C, V <sub>D</sub> = 1/2V <sub>DRM</sub>	0.2			V
(dv/dt) <sub>C</sub>	Critical Rate of Rise of Off-State Voltage at Commutation	T <sub>j</sub> = 125°C, V <sub>D</sub> = 2/3V <sub>DRM</sub> (di/dt) <sub>C</sub> = -12.5A/ms	6			V/Fs
I <sub>H</sub>	Holding Current			35		mA
R <sub>th(j-c)</sub>	Thermal Resistance	Junction to case			1.3	°C/W