

SanRex

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

TMG25C60

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

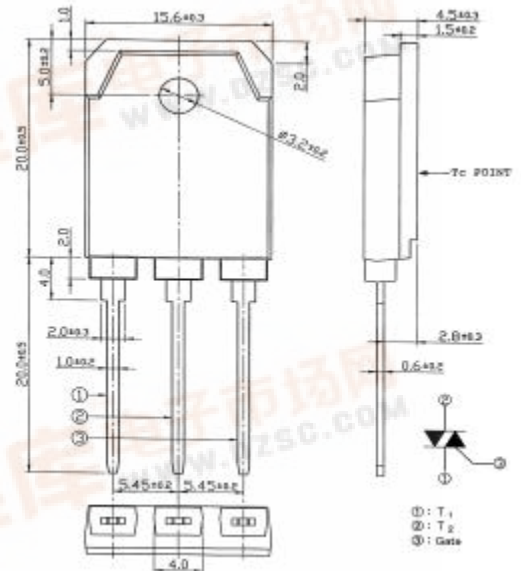
SanRex Triac **TMG25C60** is designed for full-wave AC control applications. It can be used as an ON/OFF function or for phase control operations.

Features

- * Glass-passivated junctions
- * High Surge Current

Typical Applications

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



< Maximum Ratings >

(Tj = 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	Tc = 86°C	25	A
I_{TSM}	Surge On-state Current	One cycle, 50/60Hz, peak value, non-repetitive	225/250	A
I^2t	I^2t (for fusing)	Value for one cycle of surge current	260	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
Tj	Operation Junction Temperature		-40 to +125	°C
Tstg	Storage Temperature		-40 to +125	°C
	Mass		6.2	g

< Electrical Characteristics >

(Tj = 25°C Unless Otherwise Specified)

Symbol	Item	Conditions	Ratings			Unit
			Min.	Typ.	Max.	
I_{DRM}	Repetitive Peak Off-state Current	$V_D = V_{DRM}$, Tj = 125°C, Single phase, half wave			5	mA
V_{TM}	Peak On-state Voltage	$I_T = 35A$, Inst. Measurement			1.4	V
I_{GT1+}	Gate Trigger Current	$V_D = 6V$, $R_L = 10\Omega$			30	mA
I_{GT1-}					30	
I_{GT3+}			-	-	-	
I_{GT3-}					30	
V_{GT1+}	Gate Trigger Voltage				1.5	V
V_{GT1-}					1.5	
V_{GT3+}			-	-	-	
V_{GT3-}					1.5	
V_{GD}	Non-trigger Gate Voltage	Tj = 125°C, $V_D = 1/2V_{DRM}$	0.2			V
$(di/dt)_c$	Critical Rate of Rise of Off-State Voltage at Commutation	Tj = 125°C, $V_D = 2/3V_{DRM}$ (di/dt) _c = -12.5A/ms	6			V/Fs
I_H	Holding Current			35		mA
$R_{\theta(j-c)}$	Thermal Resistance	Junction to case			1.3	°C/W