

TRIAC (ISOLATED TYPE) TO-220 PACKAGE

TMG20C60F

$I_{T(RMS)}=20A$, $V_{DRM}=600V$

UL : E76102

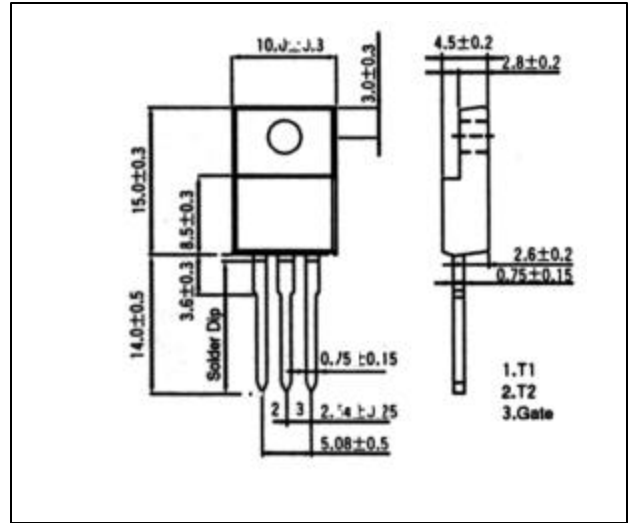
SanRex Triac **TMG20C60F** is designed for full-wave AC control applications. It can be used as an ON/OFF function or for phase control operations.

Features

- * Glass-passivated junctions
- * High Surge Current

Typical Applications

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



< Maximum Ratings >

($T_j = 25^\circ\text{C}$ Unless Otherwise Specified)

Symbol	Item	Conditions	Ratings			Unit
			Min.	Typ.	Max.	
V_{DRM}	Repetitive Peak Off-State Voltage			600		V
$I_{T(RMS)}$	R.M.S. On-state Current	$T_c = 66^\circ\text{C}$		20		A
I_{TSM}	Surge On-state Current	One cycle, 50/60Hz, peak value, non-repetitive		183/200		A
$I^2 t$	$I^2 t$ (for fusing)	Value for one cycle of surge current		165		A^2s
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
V_{ISO}	Isolation Breakdown Voltage	A.C. 1 minute		1500		V
T_j	Operation Junction Temperature			-40 to + 125		$^\circ\text{C}$
T_{stg}	Storage Temperature			-40 to + 125		$^\circ\text{C}$
	Mass			2		g

< Electrical Characteristics >

($T_j = 25^\circ\text{C}$ Unless Otherwise Specified)

Symbol	Item	Conditions	Ratings			Unit
			Min.	Typ.	Max.	
I_{DRM}	Repetitive Peak Off-state Current	$V_D = V_{DRM}$, $T_j = 125^\circ\text{C}$, Single phase, half wave			2	mA
V_{TM}	Peak On-State Voltage	$I_T = 35A$, Inst. Measurement			1.4	V
I_{GT1^+}	QI	$V_D = 6V$, $R_L = 10\Omega$			30	mA
I_{GT1^-}	QII				30	
I_{GT3^+}	QIV				-	
I_{GT3^-}	QIII				30	V
V_{GT1^+}	QI				1.5	
V_{GT1^-}	QII				1.5	
V_{GT3^+}	QIV			-	V	
V_{GT3^-}	QIII			-		
V_{GD}	Non-Trigger Gate Voltage	$T_j = 125^\circ\text{C}$, $V_D = 1/2V_{DRM}$	0.2			V
$(dv/dt)_c$	Critical Rate of Rise of Off-State Voltage at Commutation	$T_j = 125^\circ\text{C}$, $V_D = 2/3V_{DRM}$ $(di/dt)_c = -10A/ms$	10			V/Fs
I_H	Holding Current			25		mA
$R_{th(j-c)}$	Thermal Resistance	Junction to case			2.5	$^\circ\text{C/W}$