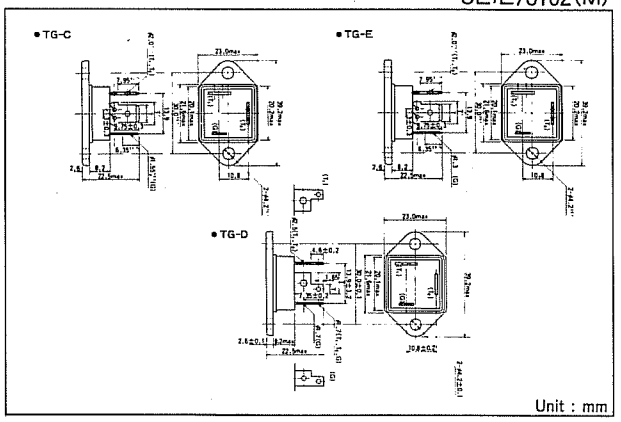
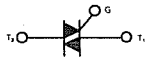
TRIAC (ISOLATED TYPE)
TG25C/E/D

UL:E76102(M)

TG25C/E/D are isolated mould triac suitable for wide range of applications like copier, Microwave oven, solid state switch, motor control, light control and heater control.

- $I_{T\,(RMS)}$ 25A
- High Surge Capability 250A
- Isolated Nounting (AC2500V)
- Tab Terminals





■Maximum Ratings

C, E and D type have same electrical charactorstics

Symbol	Item	TG25C40	TG25C60	Unit
V_{DRM}	Repetitive Peak off-State Voltage	400	600	V

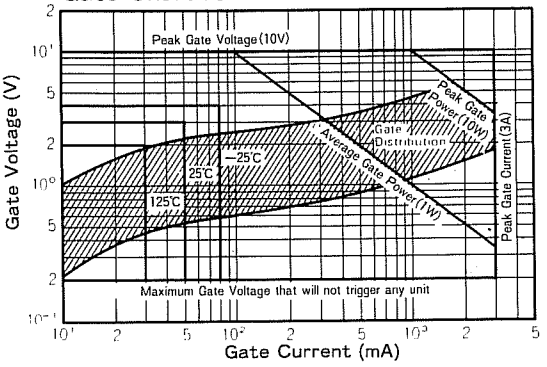
Symbol	Item	Conditions	Ratings	Unit
$I_{T\,(RMS)}$	R.M.S On-State Current	Tc=74°C	25	A
I_{TSM}	Surge On-State Current	One cycle, 50/60Hz, peak, non-repetitive	220/250	A
I^2t	I^2t	Value for one cycle of surge current	260	A^2S
P_{GM}	Peak Gate Power Dissipation		10	W
$P_{G\,(AV)}$	Average Gate Power Dissipation		1	W
I_{GM}	Peak Gate Current		3	A
V_{GM}	Peak Gate Voltage		10	V
di/dt	Critical Rate of Rise of On-State Current	I_G=100mA, Tj=25°C, V_D=1/2 V_{DRM}, dI_G/dt=1A/μs	50	A/μs
Tj	Operating Junction Temperature		−25∼+125	°C
Tstg	Storage Temperature		−40∼+125	°C
V_{ISO}	Isolation Breakdown Voltage(R.M.S)	A.C. 1minute	2500	V
	Mounting Torque	Recommended Value 10kgf·cm	12	kgf·cm
	Mass	Excluding bolt, nut and wrapping material	27	g

■Electrical Characteristics

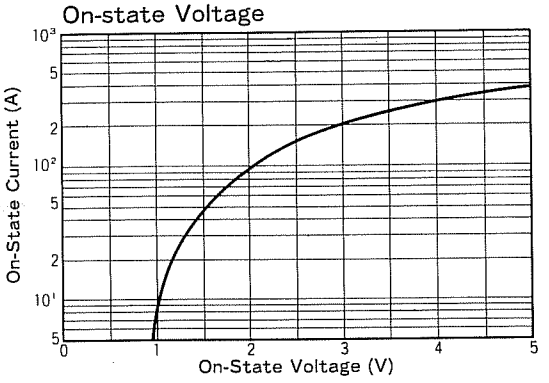
Symbol		Item	Conditions	Ratings	Unit
I_{DRM}		Repetitive Peak Off-State Current, max.	at V_{DRM}, single phase, half wave, Tj=125°C	5	mA
V_{TM}		Peak On-State Voltage, max.	$(\sqrt{2} \times I_{T(RMS)})$ Tj=25°C Inst. measurement	1.4	V
I^+_{GT1}	1	Gate Trigger Current, max.	Tj=25°C, I_T=1A, V_D=6V	50	mA
I^-_{GT1}	2		Tj=25°C, I_T=1A, V_D=6V	50	
I^+_{GT3}	3			−	
I^-_{GT3}	4		Tj=25°C, I_T=1A, V_D=6V	50	
V^+_{GT1}	1	Gate Trigger Voltage, max.	Tj=25°C, I_T=1A, V_D=6V	3	V
V^-_{GT1}	2		Tj=25°C, I_T=1A, V_D=6V	3	
V^+_{GT3}	3			−	
V^-_{GT3}	4		Tj=25°C, I_T=1A, V_D=6V	3	
V_{GD}		Non-Trigger Gate Voltage, min.	Tj=125°C, V_D=1/2 V_{DRM}	0.2	V
tgt		Turn On Time, max	$I_{T(RMS)}$, I_G=100mA, V_D=1/2 V_{DRM}, Tj=25°C dI_G/dt=1A/μs	10	μs
dv/dt		Critical Rate of Rise of On-State Voltage, min.	Tj=125°C, V_D=2/3 V_{DRM}, Exponential wave.	50	V/μs
(dv/dt) c		Critical Rate of Rise off-State Voltage at commutation, min	Tj=125°C, (di/dt) c=15A/ms, V_D=2/3 V_{DRM}	6	V/μs
I_H		Holding Current, typ.	Tj=25°C	30	mA
Rth(j-c)		Thermal Impedance, max.	Junction to case	1.6	°C/W

SanRex

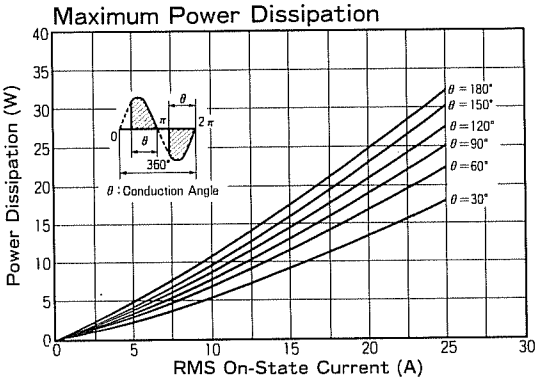
Gate Characteristics



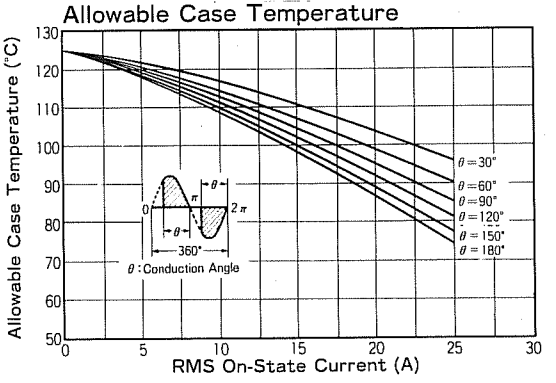
On-state Voltage



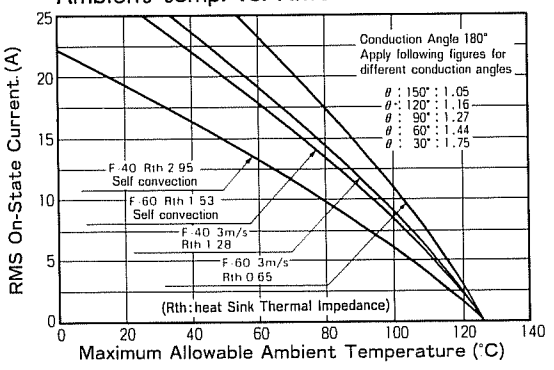
On state Current vs. Maximum Power Dissipation



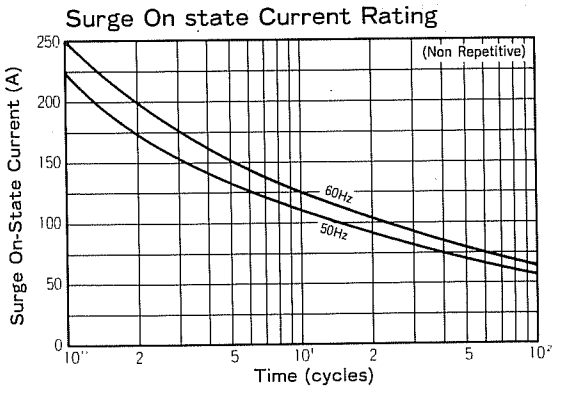
On state Current vs. Allowable Case Temperature



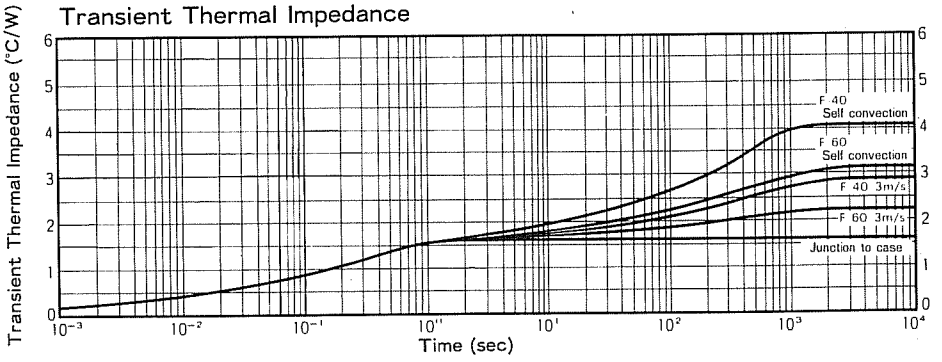
Ambient temp. vs. RMS On state Current



Surge On state Current Rating



Transient Thermal Impedance



TRIAC