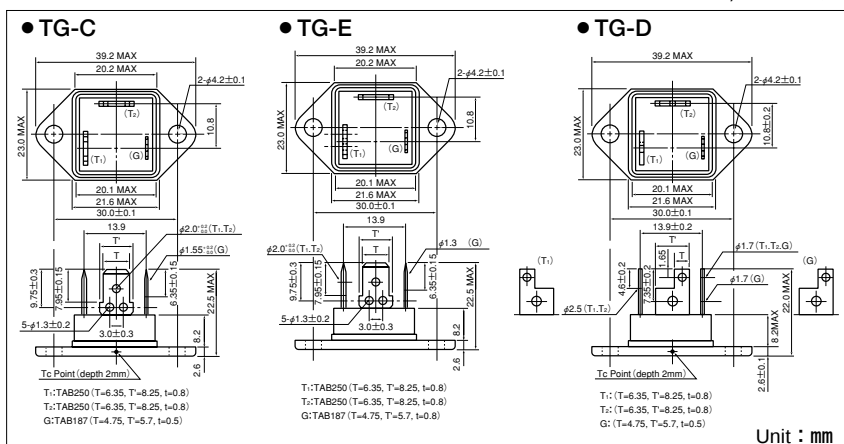
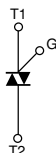


TG25C/E/D

UL:E76102(M)

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

- IT(AV) 25A
- High surge capability 250A
- Isolated Mounting (AC2500V)
- Tab Terminals



■ Maximum Ratings

(T_j=25°C unless otherwise specified)

Symbol	Item	Ratings		Unit
		TG25C40	TG25C60	
V _{DRM}	Repetitive Peak Off-State Voltage	400	600	V

Symbol	Item	Conditions	Ratings	Unit
$I_{T(RMS)}$	R.M.S. On-State Current	$T_c=74^{\circ}C$	25	A
I_{TSM}	Surge On-State Current	One cycle, 50Hz/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	$I_G=100mA, T_j=25^{\circ}C, V_D=1/2V_{DRM}, dI_G/dt=1A/\mu s$	50	$A/\mu s$
T_j	Operating Junction Temperature		-25 to $+125$	$^{\circ}C$
T_{stg}	Storage Temperature		-40 to $+125$	$^{\circ}C$
V_{ISO}	Isolation Breakdown Voltage (R.M.S.)	A.C.1 minute	2500	V
	Mounting Torque (M4)	Recommended Value 1.0-1.4(10-14)	1.5(15)	N·m (kgf·cm)
	Mass	Typical value (Excluding bolt, nut and wrapping material)	27	g

■ Electrical Characteristics

Symbol	Item	Conditions	Ratings	Unit
I _{DRM}	Repetitive Peak Off-State Current, max	V _D =V _{DRM} , Single phase, half wave, T _j =125°C	5	mA
V _{TM}	Peak On-State Voltage, max	On-State Current [$\sqrt{2} \times I_{T(RMS)}$], Inst. measurement	1.4	V
I _{GT1} ⁺	Gate Trigger Current, max	T _j =25°C, I _T =1A, V _D =6V	50	mA
I _{GT1} ⁻		T _j =25°C, I _T =1A, V _D =6V	50	
I _{GT3} ⁺			—	
I _{GT3} ⁻		T _j =25°C, I _T =1A, V _D =6V	50	
V _{GT1} ⁺	Gate Trigger Voltage, max	T _j =25°C, I _T =1A, V _D =6V	3	V
V _{GT1} ⁻		T _j =25°C, I _T =1A, V _D =6V	3	
V _{GT3} ⁺			—	
V _{GT3} ⁻		T _j =25°C, I _T =1A, V _D =6V	3	
V _{GD}	Non-Trigger Gate Voltage, min	T _j =125°C, V _D = $\frac{1}{2}$ V _{DRM}	0.2	V
t _{gt}	Turn On Time, max.	I _{T(RMS)} , I _g =100mA, V _b = $\frac{1}{2}$ V _{DRM} , T _j =25°C, di/dt=1A/μs	10	V
dv/dt	Critical Rate of Rise on-State Voltage,min.	T _j =125°C, V _D = $\frac{2}{3}$ V _{DRM} , Exponential wave.	50	V/μs
(dv/dt) _c	Critical Rate of Rise off-State Voltage at commutation, min	T _j =125°C, V _D = $\frac{2}{3}$ V _{DRM} , [di/dt] c=15A/ms	6	V/μs
I _H	Holding Current, typ.	T _j =25°C	30	mA
R _{th(j-c)}	Thermal Impedance, max	Junction to case	1.6	°C/W

