

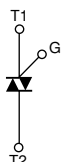
TG35C/E/D

TOP

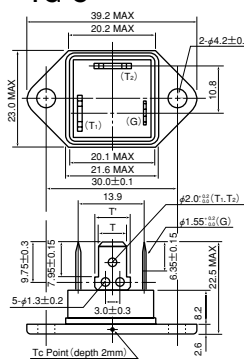
UL:E76102(M)

TG35C/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) 35A
- High surge capability 330A
- Isolated Mounting (AC2500V)
- Tab Terminals

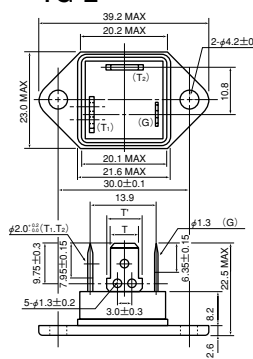


- TG-C



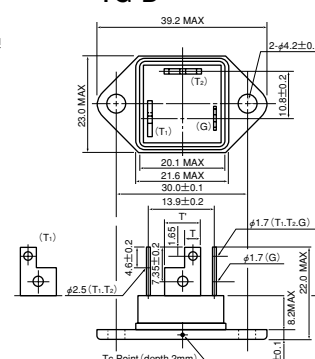
T₁:TAB250 (T=6.35, T'=8.25, t=0.8)
T₂:TAB250 (T=6.35, T'=8.25, t=0.8)
G:TAB187 (T=4.75, T'=5.7, t=0.5)

- TG-E



T₁:TAB250 (T=6.35, T=8.25, t=0.8
T₂:TAB250 (T=6.35, T=8.25, t=0.8
G:TAB187 (T=4.75, T=5.7, t=0.8)

- TG-D



T₁: (T=6.35, T'=8.25, t=0.8)
T₂: (T=6.35, T'=8.25, t=0.8)
G': (T=4.75, T'=5.7, t=0.5)

Unit : mm

■ Maximum Ratings

(Ti=25°C unless otherwise specified)

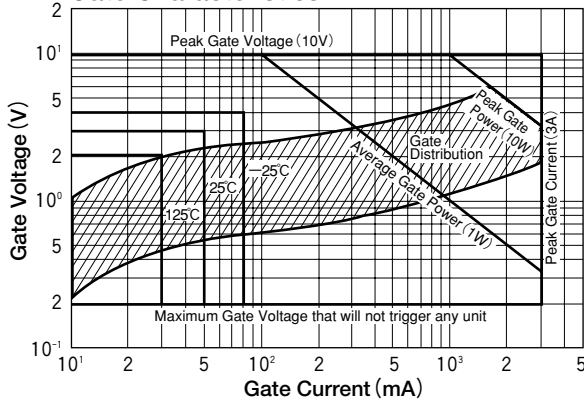
Symbol	Item	Ratings		Unit
		TG35C40	TG35C60	
V _{DRM}	Repetitive Peak Off-State Voltage	400	600	V

Symbol	Item	Conditions	Ratings	Unit
I_T (RMS)	R.M.S. On-State Current	$T_c=58^{\circ}\text{C}$	35	A
I_{TSM}	Surge On-State Current	One cycle, 50Hz/60Hz, peak, non-repetitive	300/330	A
I^2t	I^2t	Value for one cycle of surge current	450	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	$I_G=100\text{mA}$, $T_j=25^{\circ}\text{C}$, $V_D=1/2V_{DRM}$, $dI_G/dt=1\text{A}/\mu\text{s}$	50	$\text{A}/\mu\text{s}$
T_j	Operating Junction Temperature		-25 to $+125$	$^{\circ}\text{C}$
T_{stg}	Storage Temperature		-40 to $+125$	$^{\circ}\text{C}$
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)	$\text{N}\cdot\text{m}$ ($\text{kgf}\cdot\text{cm}$)
	Mass	Typical value (Excluding bolt, nut and wrapping material)	23	g

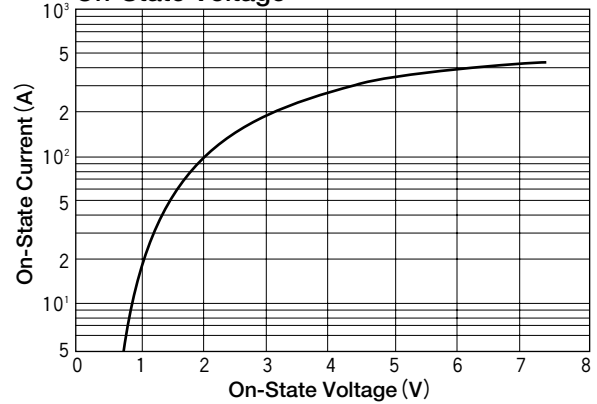
■ Electrical Characteristics

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} ⁺	1	Gate Trigger Current, max T _j =25°C, I _T =1A, V _D =6V	50	mA
I _{GT1} ⁻	2		50	
I _{GT3} ⁺	3		—	
I _{GT3} ⁻	4		50	
V _{GT1} ⁺	1	Gate Trigger Voltage, max T _j =25°C, I _T =1A, V _D =6V	3	V
V _{GT1} ⁻	2		3	
V _{GT3} ⁺	3		—	
V _{GT3} ⁻	4		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 _D = $\frac{1}{2}$ V _{DRM} , T _j =25°C, dI _G /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.	20	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	5	V/μs
I _H	Holding Current, typ.	T _j =25°C	30	mA
R _{th} (i-c)	Thermal Impedance, max	Junction to case	1.5	°C/W

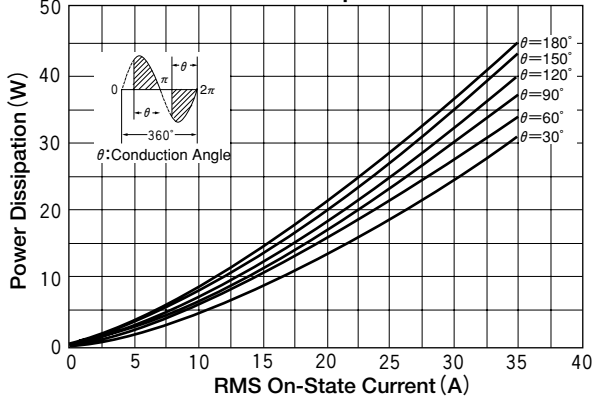
Gate Characteristics



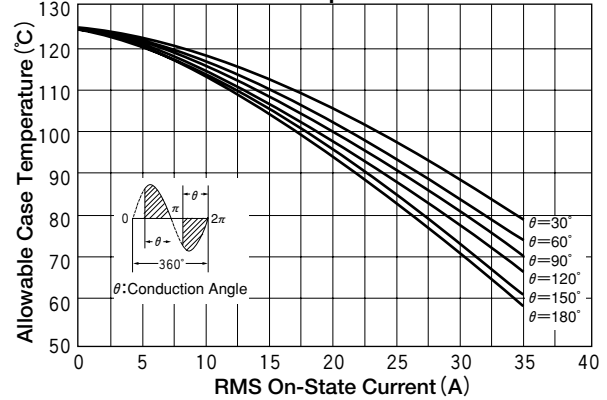
On-State Voltage



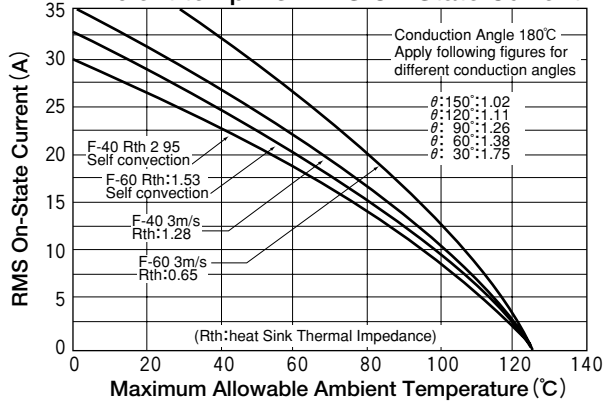
On State Current vs. Maximum Power Dissipation



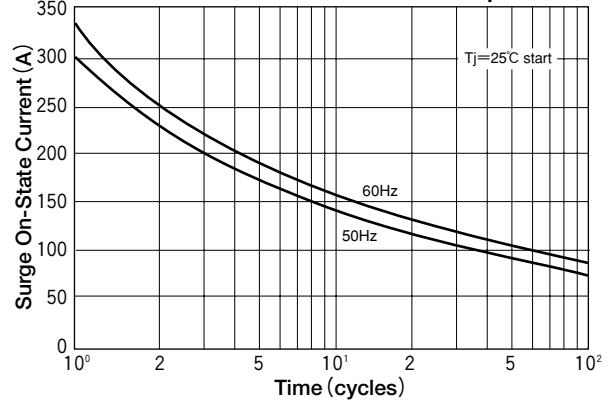
On State Current vs. Allowable Case Temperature



Ambient temp. vs. RMS On-State Current



Surge On-State Current Rating (Non-Repetitive)



Transient Thermal Impedance

