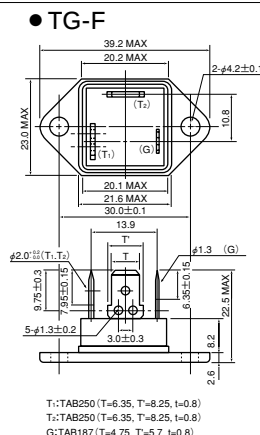
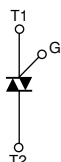


TG35F

UL:E76102(M)

TG35F 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 340A
- Isolated Mounting (AC2500V)
- Tab Terminals



Unit : mm

■ Maximum Ratings

(Tj=25°C unless otherwise specified)

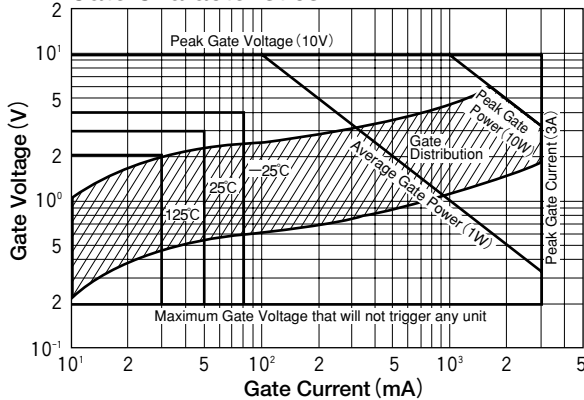
Symbol	Item	Ratings		Unit
		TG35F40	TG35F60	
V _{DRM}	Repetitive Peak Off-State Voltage	400	600	V

Symbol	Item	Conditions	Ratings	Unit
$I_{T(RMS)}$	R.M.S. On-State Current	$T_c=67^{\circ}C$	35	A
I_{TSM}	Surge On-State Current	One cycle, 50Hz/60Hz, peak, non-repetitive	310/340	A
I^2t	I^2t	Value for one cycle of surge current	485	A ² S
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	$I_G=100mA, T_j=25^{\circ}C, V_D=\frac{1}{2}V_{DRM}, dI_G/dt=1A/\mu s$	50	A/ μs
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)	23	g

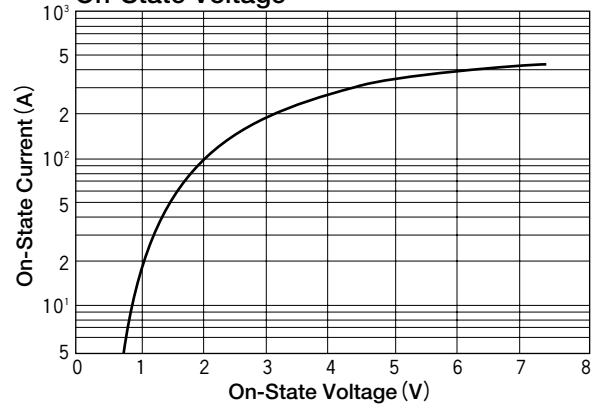
■ Electrical Characteristics

Symbol	Item		Conditions	Ratings	Unit
I _{DRM}	Reptitive Peak Off-State Current, max		V _D =V _{DRM} , Single phase, half wave, T _J =125°C	3	mA
V _{TM}	Peak On-State Voltage, max		On-State Current [$\sqrt{2} \times I_{T(RMS)}$], Inst. measurement	1.38	V
I _{GT1} ⁺	1	Gate Trigger Current, max	T _J =25°C, I _T =1A, V _D =6V	50	mA
I _{GT1} [−]	2		T _J =25°C, I _T =1A, V _D =6V	50	
I _{GT3} ⁺	3			—	
I _{GT3} [−]	4		T _J =25°C, I _T =1A, V _D =6V	50	
V _{GT1} ⁺	1	Gate Trigger Voltage, max	T _J =25°C, I _T =1A, V _D =6V	2.5	V
V _{GT1} [−]	2		T _J =25°C, I _T =1A, V _D =6V	2.5	
V _{GT3} ⁺	3			—	
V _{GT3} [−]	4		T _J =25°C, I _T =1A, V _D =6V	2.5	
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.	100	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	10	V/μs
I _H	Holding Current, typ.		T _J =25°C	30	mA
R _{th(j-c)}	Thermal Impedance, max		Junction to case	1.5	°C/W

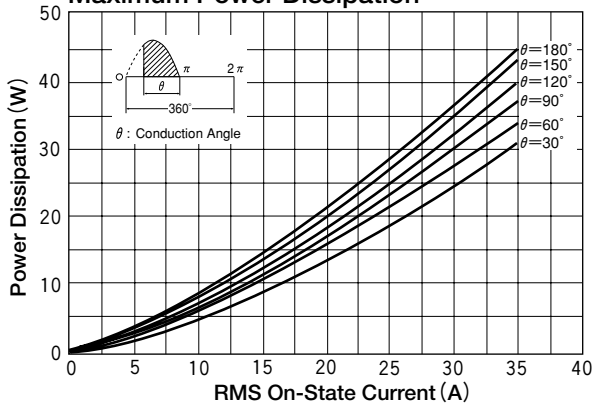
Gate Characteristics



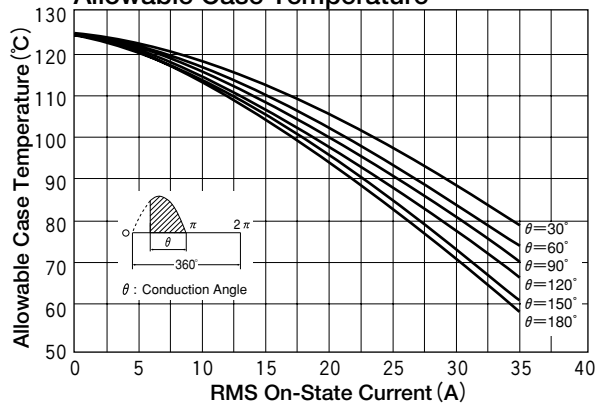
On-State Voltage



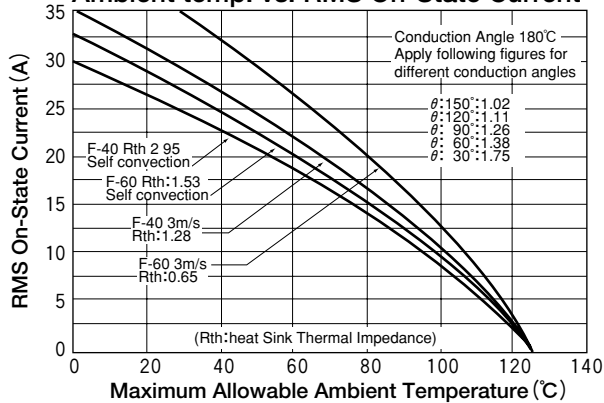
On State Current vs. Maximum Power Dissipation



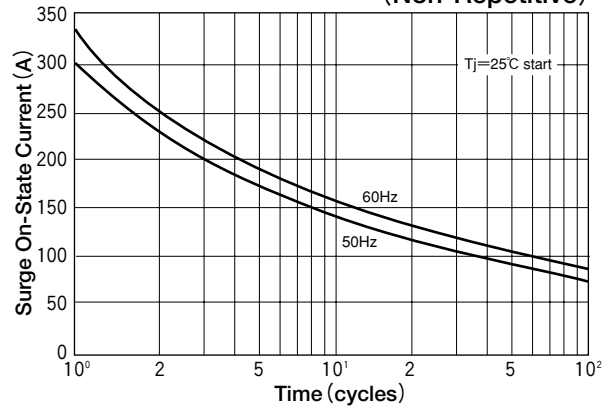
On State Current vs. Allowable Case Temperature



Ambient temp. vs. RMS On-State Current



Surge On-State Current Rating (Non-Repetitive)



Transient Thermal Impedance

