YZPST

YZPST-TG25..SERIES

TRIAC (ISOLATED TYPE) **Power Modules**

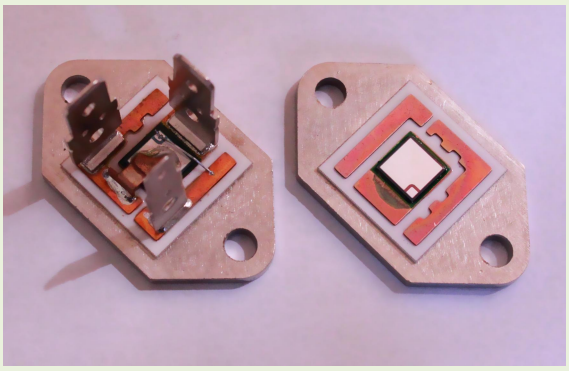
TG25C/E/D are isolated molded triacs suitable for wide range of applications like copier, microwave oven, solid state switch, motor control, light control and heater control.

IT AV 25A

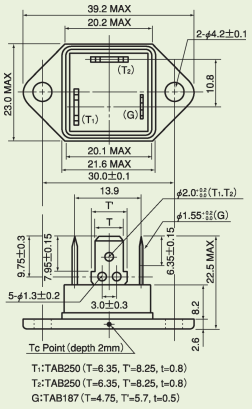
High surge capability 400A

Isolated Nounting AC2500V

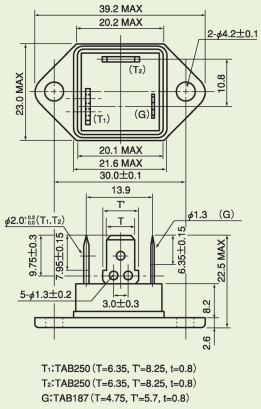
Tab Terminals



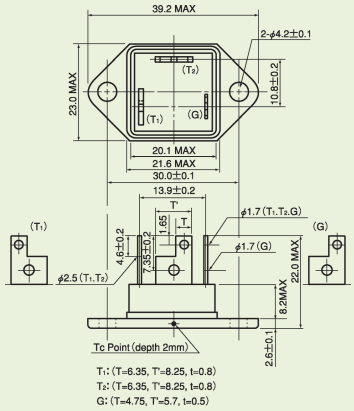
■ TG-C



■ TG-E



■ TG-E



Maximum Ratings

Symbol	Item	Conditions	Ratings	Unit
$I_{T\,RMS}$	R.M.S. On-State Current	Tc	25	A
I_{TSM}	Surge On-State Current	One cycle, 50Hz/60Hz, peak, non-repetitive	300/330	A
I^2t	I2t	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	IG=100mA,Tj=25 VD=1/2VDRM dIG/dt=1A/μS	50	A/μS
Tj	Operating Junction Temperature		-25～+125	℃
T_{stg}	Storage Temperature		-40～+125	℃
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）	14	kgf.CM

YZPST

YZPST-TG25..SERIES

TRIAC (ISOLATED TYPE) **Power Modules**

Maximum Ratings

Tj=25 unless otherwise specified

Symbol	Item	Ratings				Unit
		TG25C60	TG25C80	TG25C100	TG25C12	V
V_{DRM}	Repetitive Peak Off-State Voltage	400	800	1000	1200	V

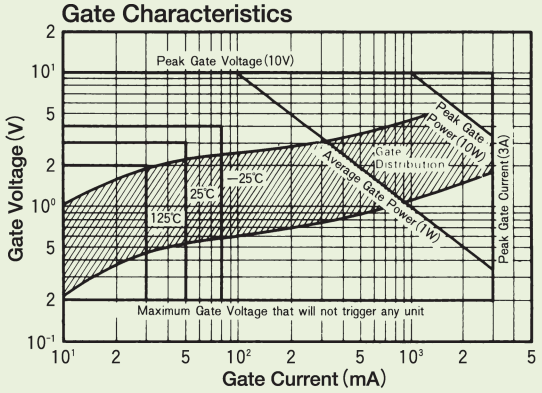
Electrical Characteristics

Symbol		Item	Conditions	Ratings	Unit
I_{DRM}		Reptitive Peak Off-State Current, max	VD=VDRM, Single phase, half wave, Tj=125℃	5	mA
V_{TM}		Peak On-State Voltage, max	On-State Current On-State Current √2X IT (RMS),Inst. measurement	1.4	V
I_{GT1} +	1	Gate Trigger Current, max	Tj =25℃, IT=1A, VD=6V	50	mA
I_{GT1} -	2		Tj =25℃, IT=1A, VD=6V	50	mA
I_{GT3} +	3			-	mA
I_{GT3} +	4		Tj =25℃, IT=1A, VD=6V	50	mA
V_{GT1+}	1	Gate Trigger Voltage, max	Tj =25℃, IT=1A, VD=6V	3	V
V_{GT1-}	2		Tj =25℃, IT=1A, VD=6V	3	V
V_{GT3+}	3			-	V
V_{GT3-}	4		Tj =25℃, IT=1A, VD=6V	3	
V_{GD}		Non-Trigger Gate Voltage, min	Tj =25℃, VD=1/2VRRM	0.2	V
tgt		Turn On Time, max.	IT=(RMS),IG=100mA,VD=1/2VDRM,Tj=25℃,dIG/dt=1A/μS	10	V
dv/dt		Critical Rate of Rise on-State Voltage,min.	Tj=25℃,VD=2/3VDRM Exoponential wave.	20	V/μS
(dv/dt) c		Critical Rate of Rise off-State Voltage at commutation, min	Tj=25℃,VD=2/3VDRM di/dtc=15A/μS	5	V/μS
I_H		Holding Current, typ.	Tj =25℃	30	mA
$R_{th(j-c)}$		Thermal Impedance, max	Junction to case	1.5	℃/W

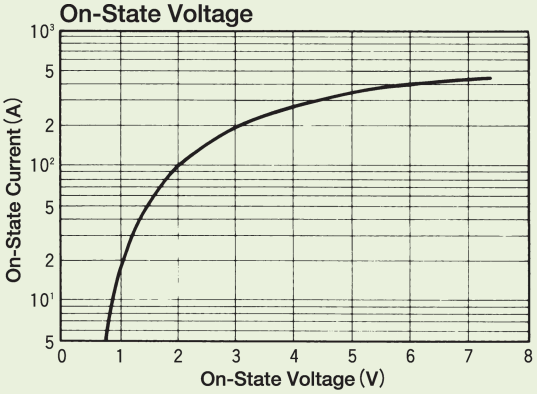
ELECTRICAL SPECIFICATIONS

Power Modules

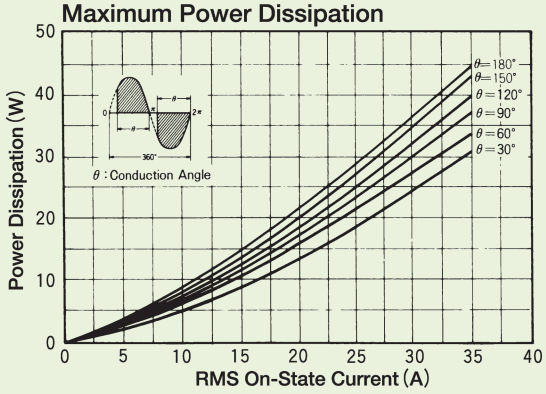
Gate Characteristics



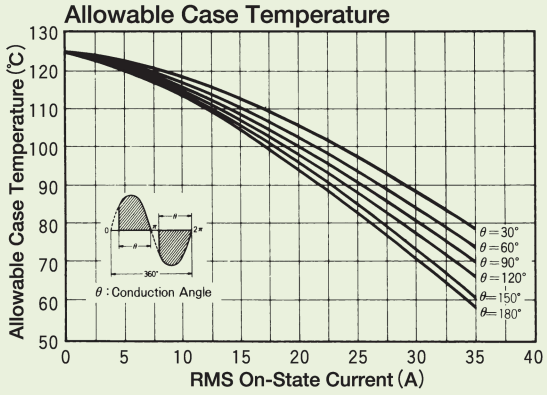
On-State Voltage



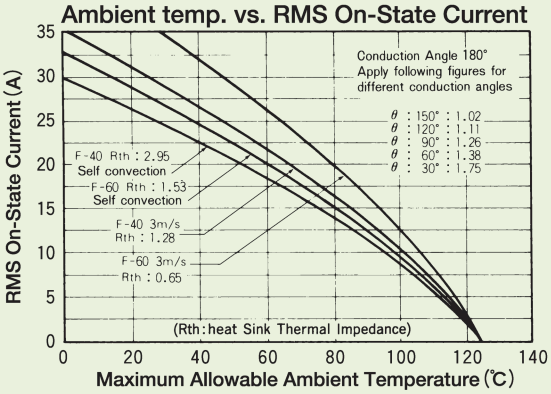
On State Current vs. Maximum Power Dissipation



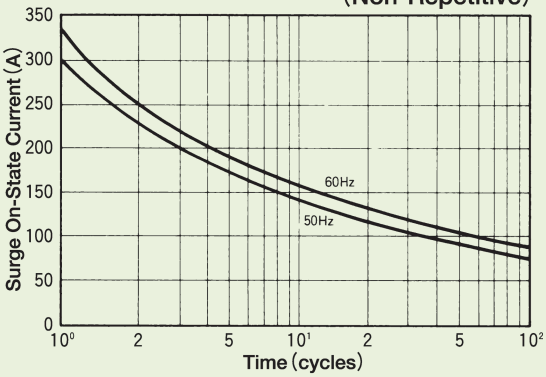
On State Current vs. Allowable Case Temperature



Ambient temp. vs. RMS On-State Current



Surge On-State Current Rating (Non-Repetitive)



Transient Thermal Impedance