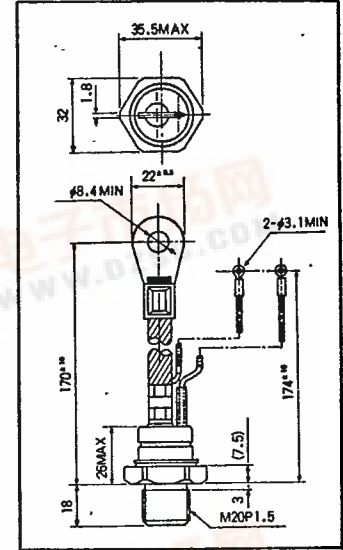
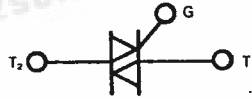


TRIAC SSG150C

T-25-19

For general A.C. power control applications such as A.C. switches, light controls, speed controls and heater controls etc.

- General A.C. power use
- $I_{T,RMS}=150A$
- High voltage up to 1200V
- High surge current of 2200A
- Package types; stud



Maximum Ratings

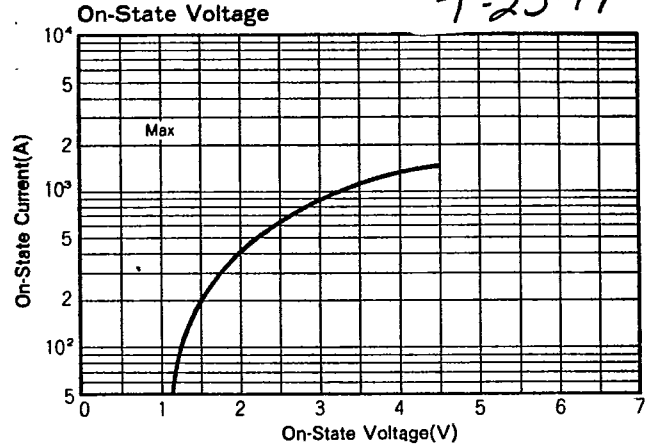
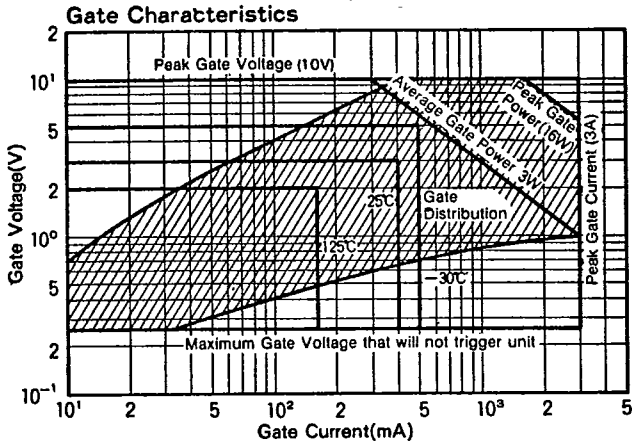
Item	Symbol	Unit	SSG150C 20	SSG150C 30	SSG150C 40	SSG150C 50	SSG150C 60	SSG150C 80	SSG150C 100	SSG150C 120
Repetitive Peak Off-State Voltage	V_{DRM}	V	200	300	400	500	600	800	1000	1200

Item	Symbol	Unit	Rating	Reference
RMS On-State Current	$I_{T,RMS}$	A	150	$T_c=84^\circ C$
Surge On-State Current	I_{TSM}	A	1,980/2,200	One cycle 50/60Hz, peak, non-repetitive
I^2t (for fusing)	I^2t	A ² S	20,000	1 cycle
Peak Gate Power Dissipation	P_{GM}	W	16	
Average Gate Power Dissipation	$P_{G(AV)}$	W	3	
Peak Gate Current	I_{GM}	A	3	
Peak Gate Voltage	V_{GM}	V	10	
Critical Rate of Rise of On-State Current	di/dt	A/ μs	50	$I_c=400mA$ $T_j=25^\circ C$ $V_D=1/2 V_{DRM}$ $dlc/dt=1A/\mu s$
Operating Junction Temperature	T_j	$^\circ C$	-30~+125	
Storage Temperature	T_{stg}	$^\circ C$	-30~+125	
Mounting Torque		kgf·cm	200	Recommended 160kgf·cm
Mass		g	194	Excluding bolt, nut and wrapping material

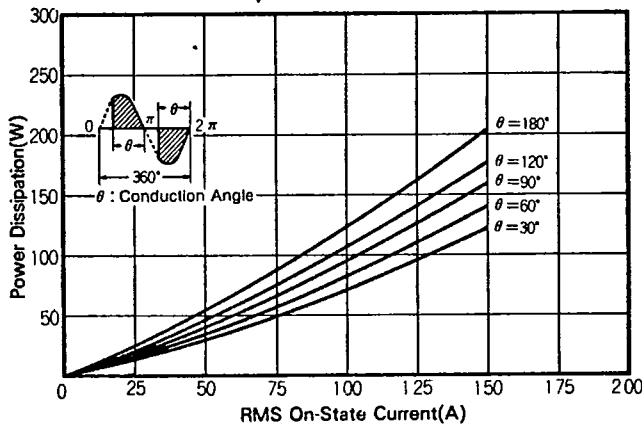
Electrical Characteristics

Item	Symbol	Unit	Rating	Reference
Repetitive Peak Off-State Current, max.	I_{DRM}	mA	15	at V_{DRM} . Single phase, half wave
Peak On-State Voltage, max.	V_{TM}	V	1.5	$I_T=210A$ $T_j=25^\circ C$ Inst. measurement
Gate Trigger Current, max.	1 I_{GT1}	mA	400	$T_j=25^\circ C$ $I_T=1A$ $V_D=6V$
	2 I_{GT1}	mA	400	$T_j=25^\circ C$ $I_T=1A$ $V_D=6V$
	3 I_{GT3}	mA	—	
	4 I_{GT3}	mA	400	$T_j=25^\circ C$ $I_T=1A$ $V_D=6V$
Gate Trigger Voltage, max.	1 V_{GT1}	V	3	$T_j=25^\circ C$ $I_T=1A$ $V_D=6V$
	2 V_{GT1}	V	3	$T_j=25^\circ C$ $I_T=1A$ $V_D=6V$
	3 V_{GT3}	V	—	
	4 V_{GT3}	V	3	$T_j=25^\circ C$ $I_T=1A$ $V_D=6V$
Non-Trigger Gate Voltage, min.	V_{GD}	V	0.25	$T_j=125^\circ C$ $V_D=1/2 V_{DRM}$
Turn On Time, max.	tgt	μs	10	$I_T=150A$ $I_c=400mA$ $V_D=1/2 V_{DRM}$ $T_j=25^\circ C$ $dlc/dt=1A/\mu s$
Critical Rate of Rise of Off-State Voltage, min.	dv/dt	V/ μs	50	$T_j=125^\circ C$, $V_D=2/3 V_{DRM}$ Exponential wave.
Critical Rate of Rise of Off-State Voltage at Commutation, min.	$(dv/dt)_c$	V/ μs	50	$T_j=125^\circ C$, $(di/dt)_c=1 A/ms$, $V_D=2/3 V_{DRM}$
Holding Current, typ.	I_H	mA	100	$T_j=25^\circ C$.
Thermal Impedance, max.	R_{th}	$^\circ C/W$	0.2	Junction to case

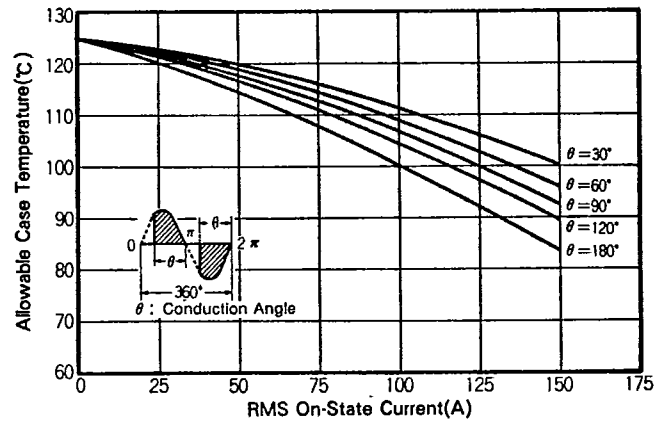
T-25-19



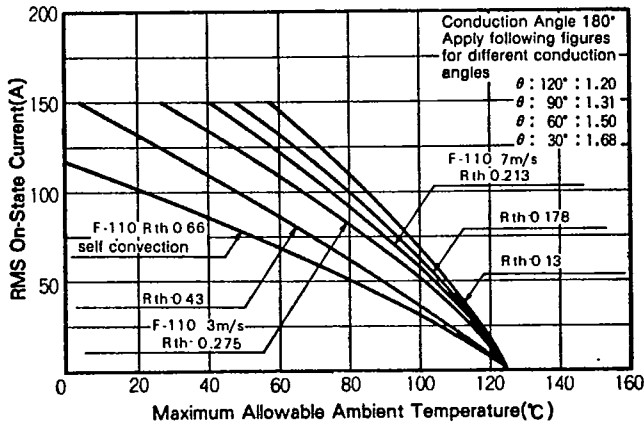
RMS On-State Current vs. Maximum Power Dissipation



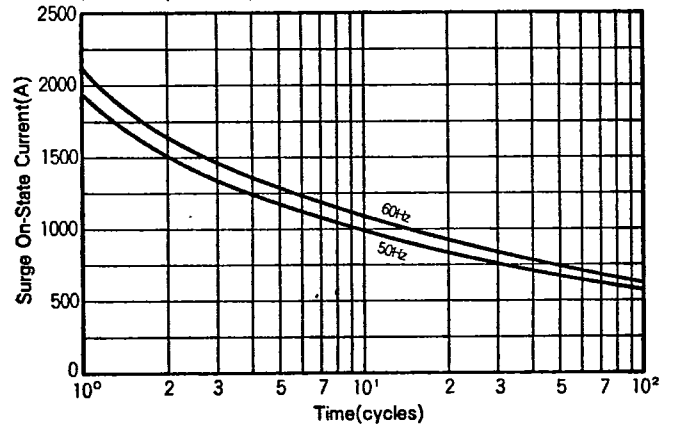
RMS On-State Current vs. Allowable Case Temperature



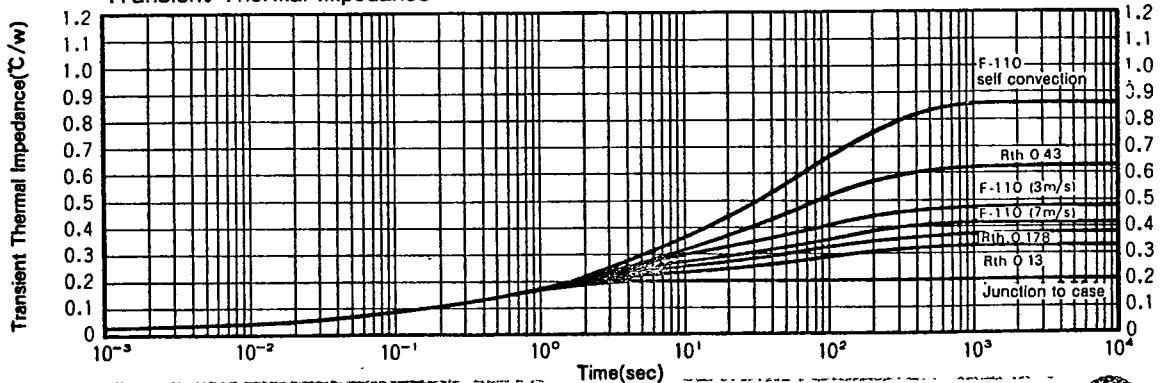
Ambient Temp. vs. RMS On-State Current (Rth: heat sink thermal impedance)



Surge On-State Current Rating (Non-Repetitive)



Transient Thermal Impedance





DIMENSIONS

DIMENSIONS

(m/m)

