

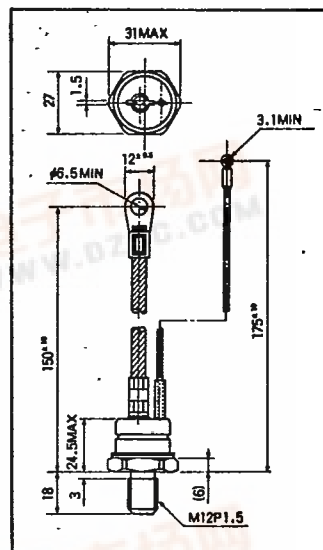
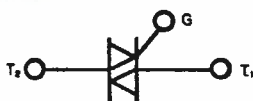
TRIAC SSG100C

T-25-19

T/01

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
- $I_{T(RMS)}=100A$
- High voltage up to 1200V
- High surge current of 1200A
- Package types; stud



Maximum Ratings

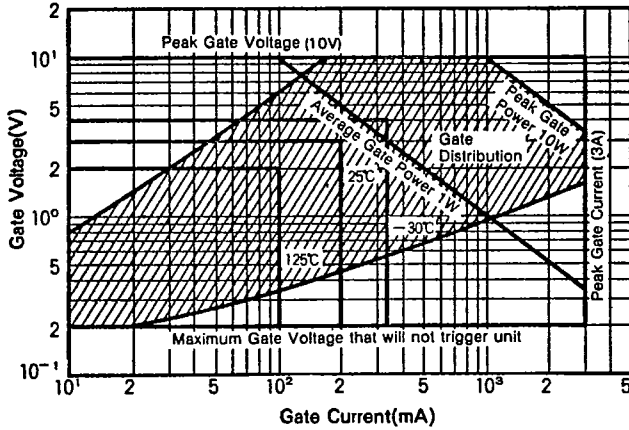
Item	Symbol	Unit	SSG100C-20	SSG100C-30	SSG100C-40	SSG100C-50	SSG100C-60	SSG100C-80	SSG100C-100	SSG100C-120
Repetitive Peak Off-State Voltage	V_{DRM}	V	200	300	400	500	600	800	1000	1200

Item	Symbol	Unit	Rating	Reference
RMS On-State Current	$I_{T(RMS)}$	A	100	$T_c=83^\circ C$
Surge On-State Current	I_{TSM}	A	1,080/1,200	One cycle 50/60Hz, peak, non-repetitive
I^2t (for fusing)	I^2t	A ² S	6,000	1 cycle
Peak Gate Power Dissipation	P_{GM}	W	10	
Average Gate Power Dissipation	$P_{G(AV)}$	W	1	
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	$I_c=200mA$ $T_j=25^\circ C$ $V_D=\frac{1}{2}V_{DRM}$ $dI_c/dt=1A/\mu s$
Operating Junction Temperature	T_j	$^\circ C$	-30~+125	
Storage Temperature	T_{stg}	$^\circ C$	-30~+125	
Mounting Torque		kgf·cm	140	Recommended 112 kgf·cm
Mass		g	96	Excluding nut & washer. 12.5g and wrapping material 22.6g

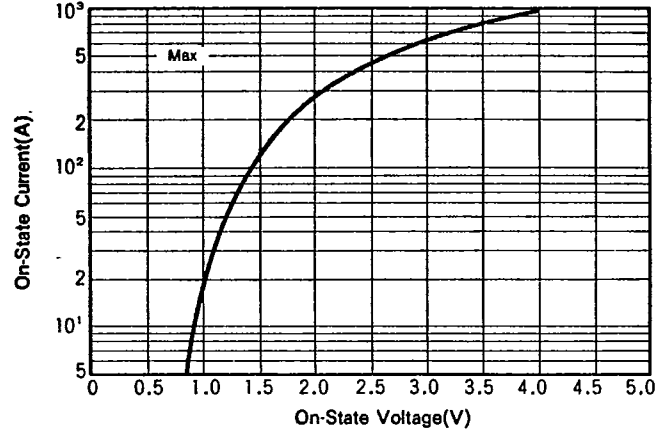
Electrical Characteristics

Item	Symbol	Unit	Rating	Reference
Repetitive Peak Off-State Current, max.	I_{DRM}	mA	10	at V_{DRM} Single phase, half wave
Peak On-State Voltage, max.	V_{TM}	V	1.55	$I_T=25A$ $T_j=25^\circ C$ Inst. measurement
Gate Trigger Current, max.	1 I_{GT1}	mA	200	$T_j=25^\circ C$ $I_T=1A$ $V_D=6V$
	2 I_{GT2}	mA	200	$T_j=25^\circ C$ $I_T=1A$ $V_D=6V$
	3 I_{GT3}	mA	—	
	4 I_{GT4}	mA	200	$T_j=25^\circ C$ $I_T=1A$ $V_D=6V$
Gate Trigger Voltage, max.	1 V_{GT1}	V	3	$T_j=25^\circ C$ $I_T=1A$ $V_D=6V$
	2 V_{GT2}	V	3	$T_j=25^\circ C$ $I_T=1A$ $V_D=6V$
	3 V_{GT3}	V	—	
	4 V_{GT4}	V	3	$T_j=25^\circ C$ $I_T=1A$ $V_D=6V$
Non-Trigger Gate Voltage, min.	V_{GD}	V	0.2	$T_j=125^\circ C$ $V_D=\frac{1}{2}V_{DRM}$
Turn On Time, max.	t_{gt}	μs	10	$I_T=100A$ $I_c=200mA$ $V_D=\frac{1}{2}V_{DRM}$ $T_j=25^\circ C$ $dI_c/dt=1A/\mu s$
Critical Rate of Rise of Off-State Voltage, min.	dv/dt	V/ μs	50	$T_j=125^\circ C$, $V_D=\frac{2}{3}V_{DRM}$ Exponential wave.
Critical Rate of Rise of Off-State Voltage at Commutation, min.	$(dv/dt)_c$	V/ μs	20	$T_j=125^\circ C$, $(di/dt)_c=40A/ms$, $V_D=\frac{2}{3}V_{DRM}$
Holding Current, typ.	I_H	mA	70	$T_j=25^\circ C$

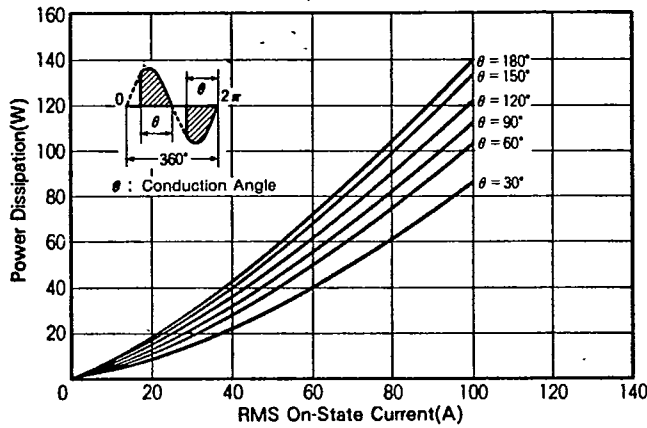
Gate Characteristics



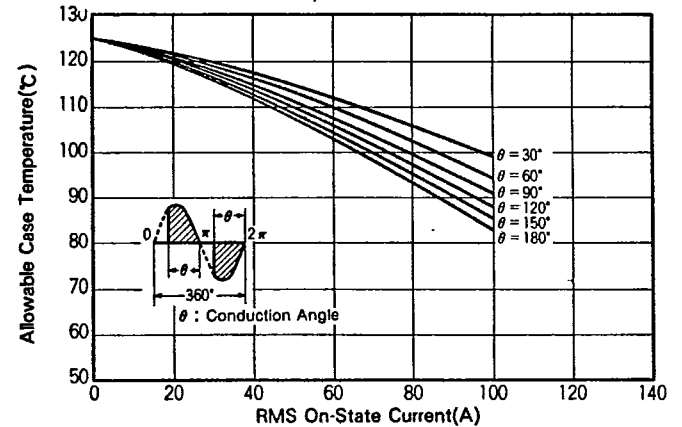
On-State Voltage



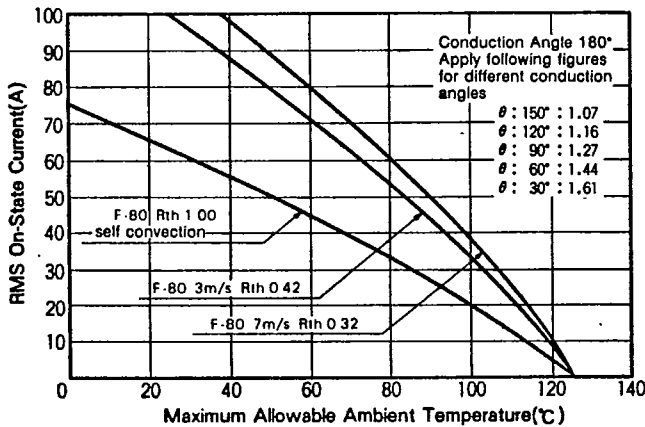
RMS On-State Current vs. Maximum Power Dissipation



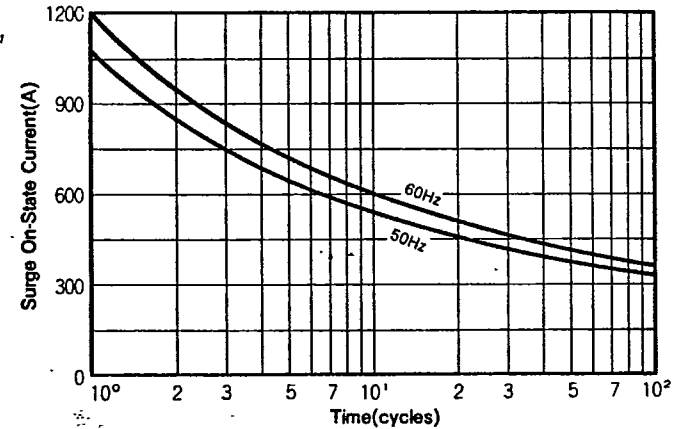
RMS On-State Current vs. Allowable Case Temperature



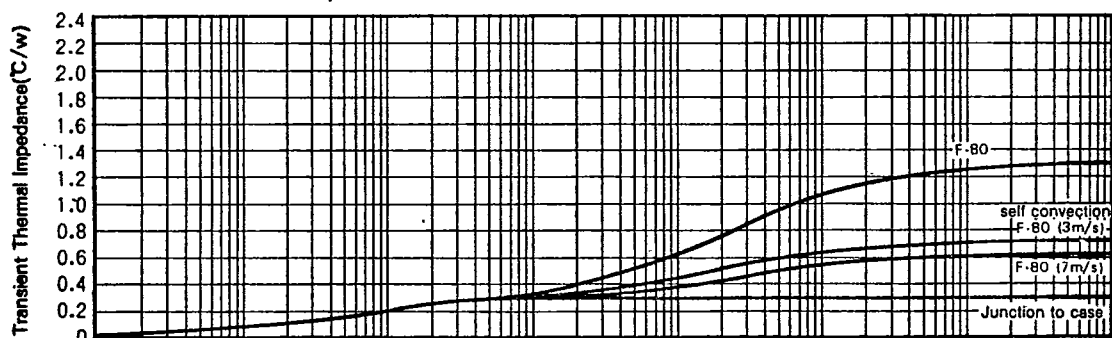
Ambient Temp. vs. RMS On-State Current (Rth:heat sink thermal impedance)



Surge On-State Current Rating (Non-Repetitive)



Transient Thermal Impedance



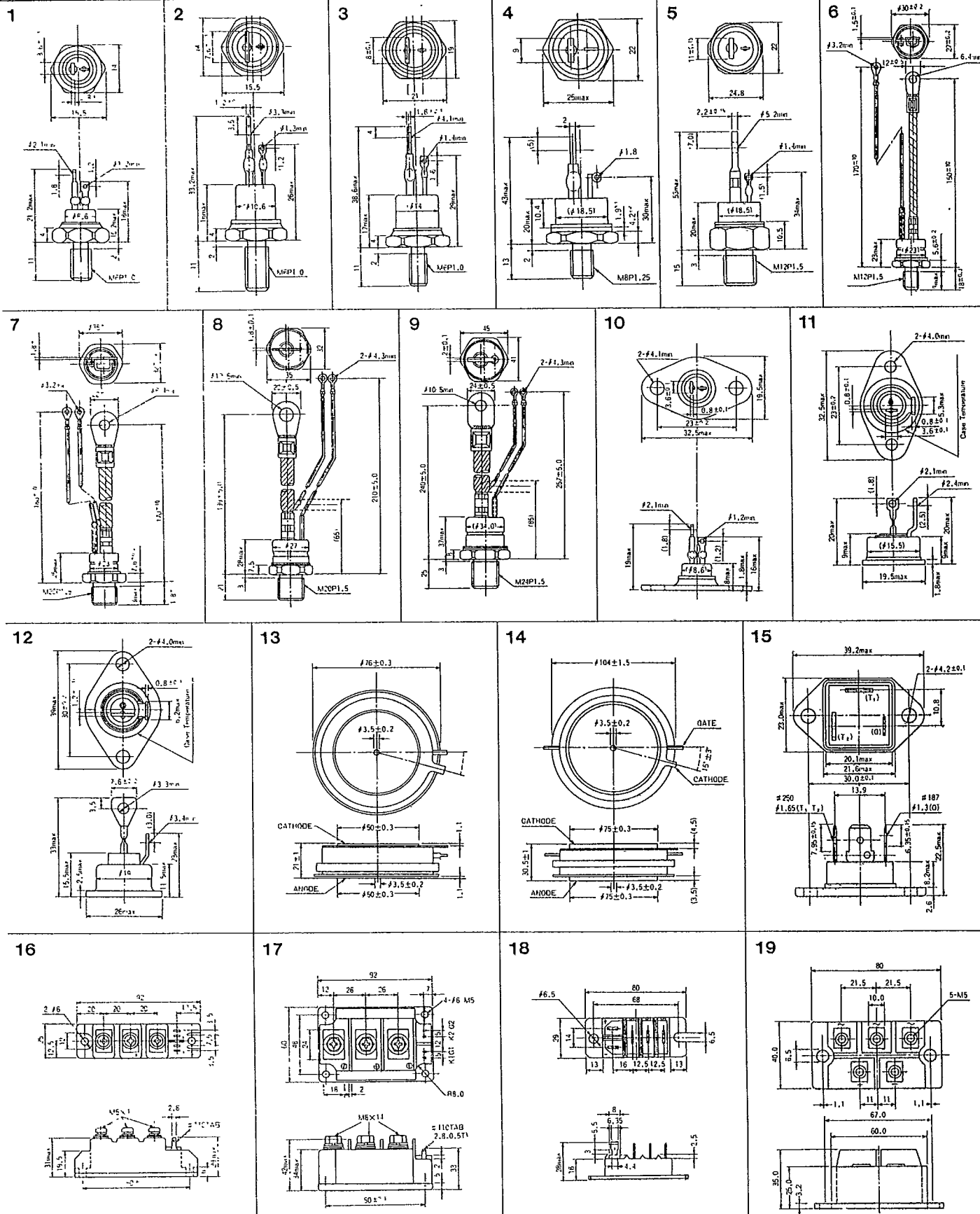
SanRex®

DIMENSIONS

T-91-20

DIMENSIONS

IT IS FOR YOUR REFERENCE.
PLEASE SEE INDIVIDUAL CATALOG OR SPECIFICATIONS FOR FURTHER DETAILS.





DIMENSIONS

DIMENSIONS

(m/m)

