

TRIAC

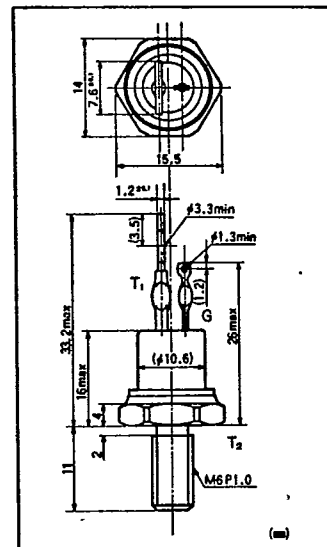
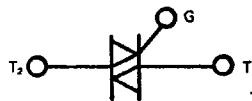
SSG25C

T-25-17

7/04

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
- $I_{T(RMS)} = 25\text{ A}$
- High voltage up to 1200V
- High surge current of 250A
- Package types; stud



■ Maximum Ratings

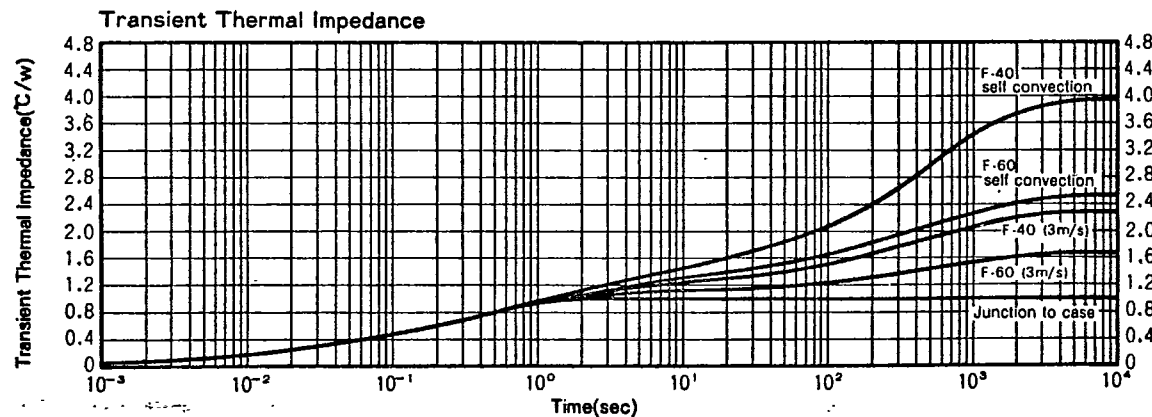
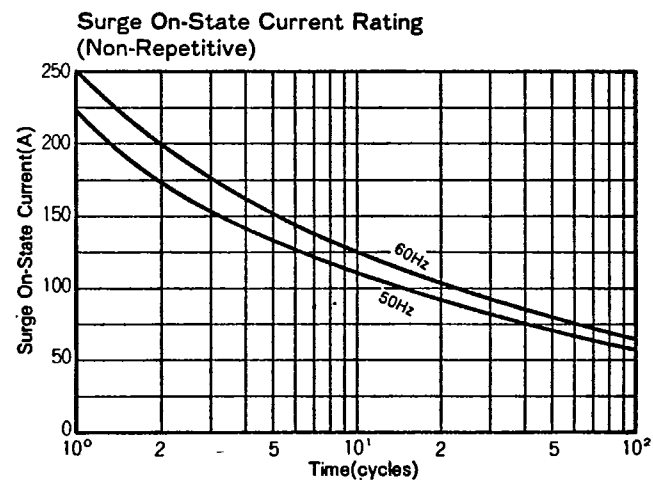
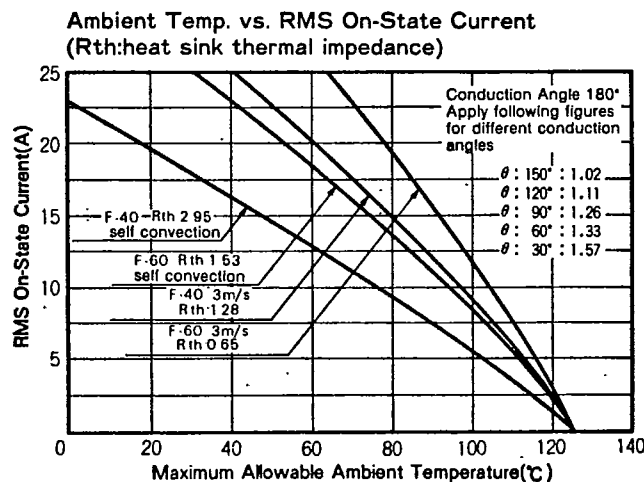
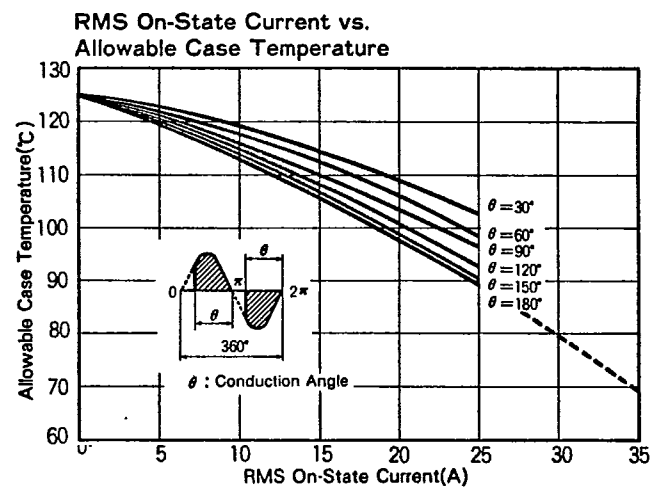
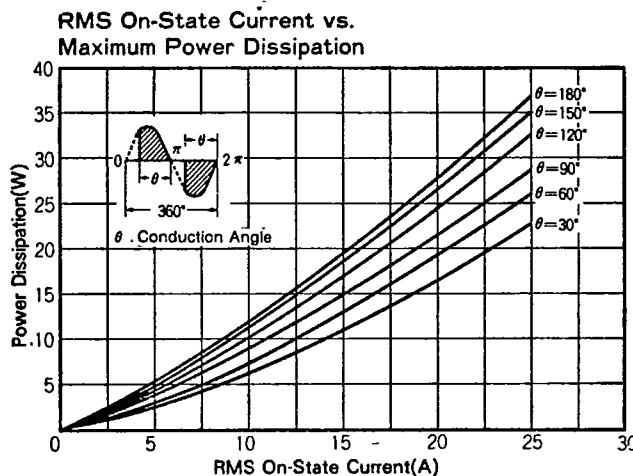
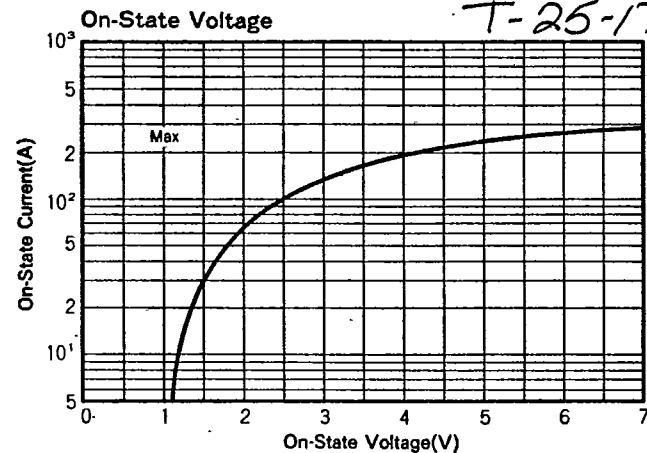
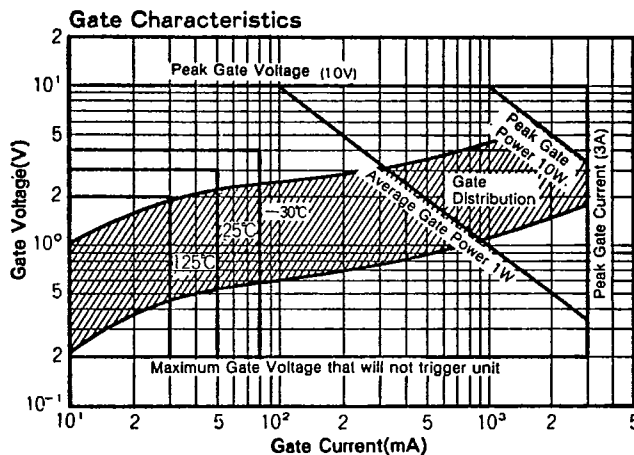
Item	Symbol	Unit	SSG25C 20	SSG25C 30	SSG25C 40	SSG25C 50	SSG25C 60	SSG25C 80	SSG25C 100	SSG25C 120
Repetitive Peak Off-State Voltage	V_{DSM}	V	200	300	400	500	600	800	1000	1200

Item	Symbol	Unit	Rating	Reference
RMS On-State Current	$I_{T(RMS)}$	A	25	$T_c=88^{\circ}\text{C}$
Surge On-State Current	I_{TSM}	A	220/250	One cycle 50/60Hz, peak, non-repetitive
I^2t (for fusing)	I^2t	A ² S	260	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	$I_c=100\text{mA}$ $T_j=25^{\circ}\text{C}$ $V_0=\frac{1}{2}V_{DWM}$ $di_c/dt=1\text{A}/\mu\text{s}$
Operating Junction Temperature	T_j	$^{\circ}\text{C}$	$-30\sim+125$	
Storage Temperature	T_{stg}	$^{\circ}\text{C}$	$-30\sim+125$	
Mounting Torque		kgf $\cdot$ cm	15	Recommended 12kgf $\cdot$ cm
Mass		g	13.6	Excluding nut & washer. 2.6g. and wrapping material 3g

■ Electrical Characteristics

Item	Symbol	Unit	Rating	Reference
Repetitive Peak Off-State Current, max.	I_{DRM}	mA	5	at V_{DRM} , Single phase, half wave
Peak On-State Voltage, max.	V_{TM}	V	1.6	$I_T=35A$ $T_j=25^\circ C$ Inst. measurement
Gate Trigger Current, max.	1 I_{GT1}^+	mA	70	$T_j=25^\circ C$ $I_T=1A$ $V_D=6V$
	2 I_{GT1}^-	mA	70	$T_j=25^\circ C$ $I_T=1A$ $V_D=6V$
	3 I_{GT3}^+	mA	—	
	4 I_{GT3}^-	mA	70	$T_j=25^\circ C$ $I_T=1A$ $V_D=6V$
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	0.2	$T_j=125^\circ C$ $V_D=\frac{1}{2}V_{DRM}$
Turn On Time, max.	tgt	μs	10	$I_T=25A$ $I_G=100mA$ $V_D=\frac{1}{2}V_{DRM}$ $T_j=25^\circ C$ $di/dt=1A/\mu s$
Critical Rate of Rise of Off-State Voltage, min.	dv/dt	V/ μs	100	$T_j=125^\circ C$, $V_D=\frac{2}{3}V_{DRM}$ Exponential wave.
Critical Rate of Rise of Off-State Voltage at Commutation, min.	(dv/dt) _c	V/ μs	20	$T_j=125^\circ C$, $(di/dt)_c=15A/ms$, $V_D=\frac{2}{3}V_{DRM}$
Holding Current, typ.	I_H	mA	30	$T_j=25^\circ C$
Thermal Impedance, max.	R _{th}	$^\circ C/W$	1.0	Junction to case

T-25-17



T-91-20

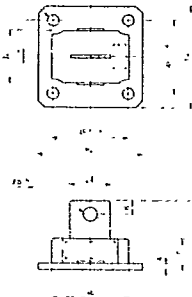
PLEASE SEE INDIVIDUAL CATALOG OR SPECIFICATIONS FOR FURTHER DETAILS.



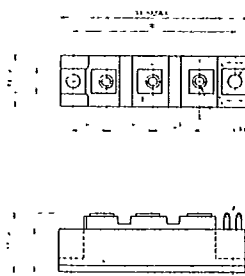
SanRex®**DIMENSIONS****DIMENSIONS**

(m/m)

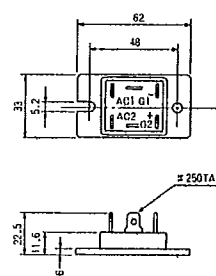
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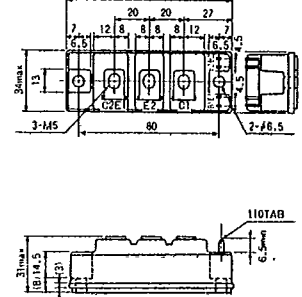
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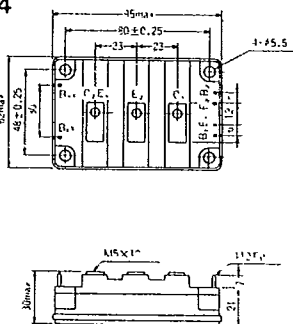
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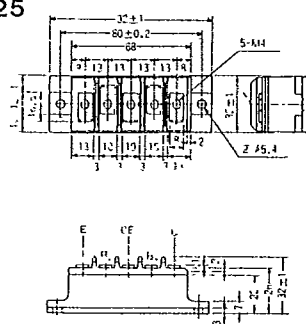
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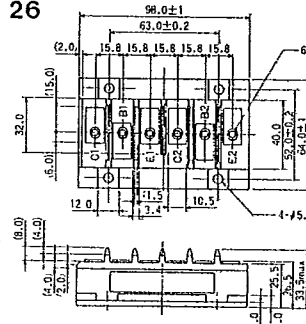
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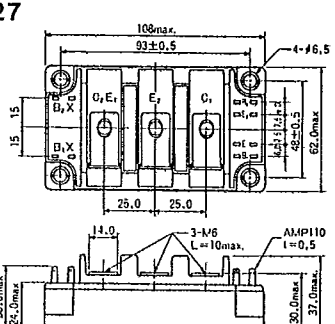
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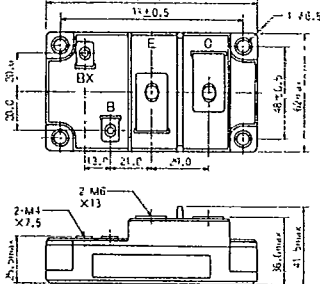
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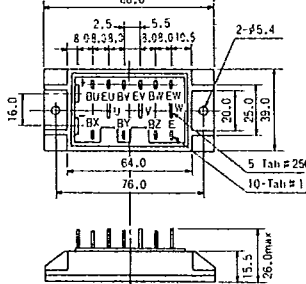
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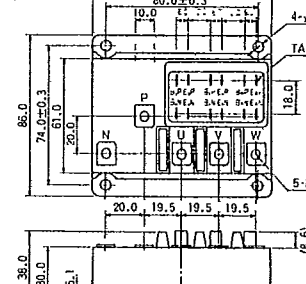
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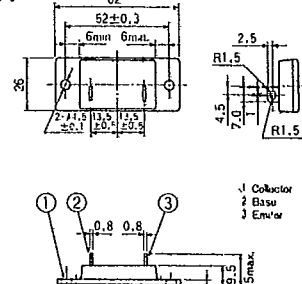
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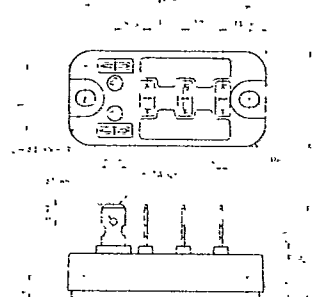
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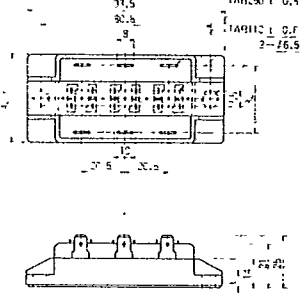
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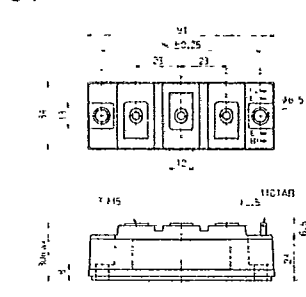
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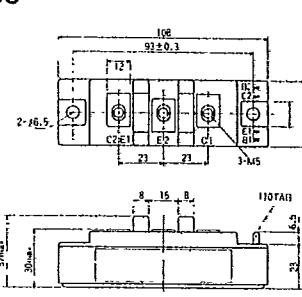
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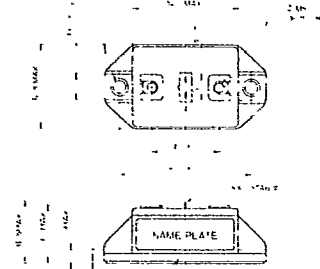
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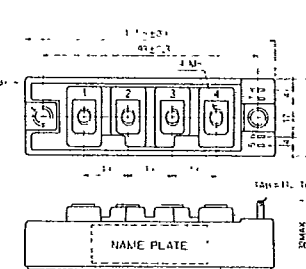
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