

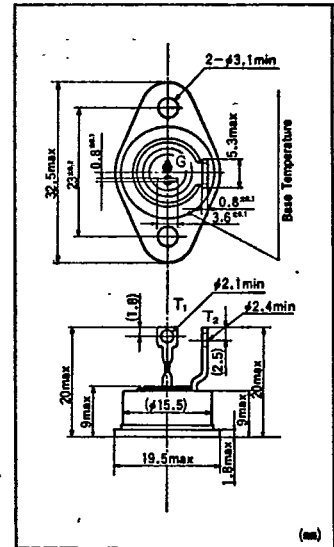
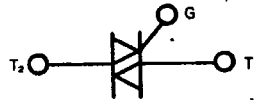
ISOLATED TYPE
TRIAC

SSG16C-Y

T-25-15

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
- $I_{T(RMS)}=16A$
- High voltage up to 1200V
- High surge current of 160A
- Package types; diamond



Maximum Ratings

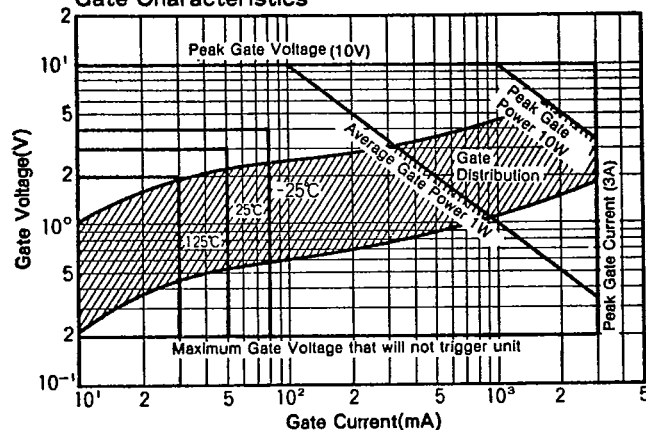
Item	Symbol	Unit	SSG16C 20Y	SSG16C 30Y	SSG16C 40Y	SSG16C 50Y	SSG16C 60Y	SSG16C 80Y	SSG16C 100Y	SSG16C 120Y
Repetitive Peak Off-State Voltage	V_{DRM}	V	200	300	400	500	600	800	1000	1200

Item	Symbol	Unit	Rating	Reference
RMS On-State Current	$I_{T(RMS)}$	A	16	$T_c=82^\circ C$
Surge On-State Current	I_{TSM}	A	140/160	One cycle 50/60Hz, peak, non-repetitive
I^2t (for fusing)	I^2t	A ² S	106	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	$I_G=100mA$ $T_j=25^\circ C$ $V_D=\frac{1}{2}V_{DRM}$ $di/dt=1A/\mu s$
Isolation Breakdown Voltage(R.M.S.)	V_{ISO}	V	2,500	A.C.1minute
Operating Junction Temperature	T_j	$^\circ C$	-25~+125	
Storage Temperature	T_{stg}	$^\circ C$	-25~+125	
Mounting Torque		kgf·cm	10	Recommended 8 kgf·cm
Mass		g	10.3	Excluding bolt, nut and wrapping material

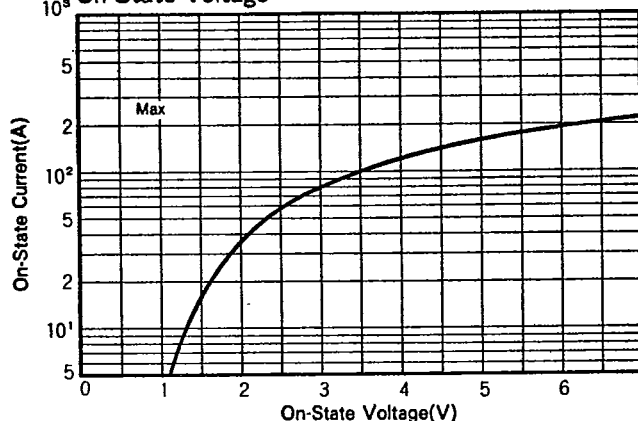
Electrical Characteristics

Item	Symbol	Unit	Rating	Reference
Repetitive Peak Off-State Current, max.	I_{DRM}	mA	3	at V_{DRM} , Single phase, half wave
Peak On-State Voltage, max.	V_{TM}	V	1.7	$I_T=25A$ $T_j=25^\circ C$ Inst. measurement
Gate Trigger Current, max.	1 I_{GT1}	mA	50	$T_j=25^\circ C$ $I_T=1A$ $V_D=6V$
	2 I_{GT1}	mA	50	$T_j=25^\circ C$ $I_T=1A$ $V_D=6V$
	3 I_{GT3}	mA	—	
	4 I_{GT3}	mA	50	$T_j=25^\circ C$ $I_T=1A$ $V_D=6V$
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.	t_{gt}	μs	10	$I_T=16A$ $I_G=100mA$ $V_D=\frac{1}{2}V_{DRM}$ $T_j=25^\circ C$ $di/dt=1A/\mu s$
Critical Rate of Rise of Off-State Voltage, min.	dv/dt	V/ μs	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	6	$T_j=125^\circ C$, $(di/dt)_c=8 A/ms$, $V_D=\frac{2}{3}V_{DRM}$
Holding Current, typ.	I_H	mA	30	$T_j=25^\circ C$
Thermal Impedance, max.	R_{th}	$^\circ C/W$	1.8	Junction to case

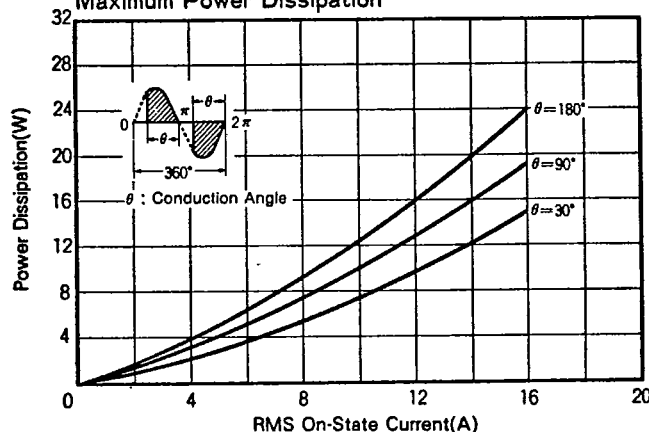
Gate Characteristics



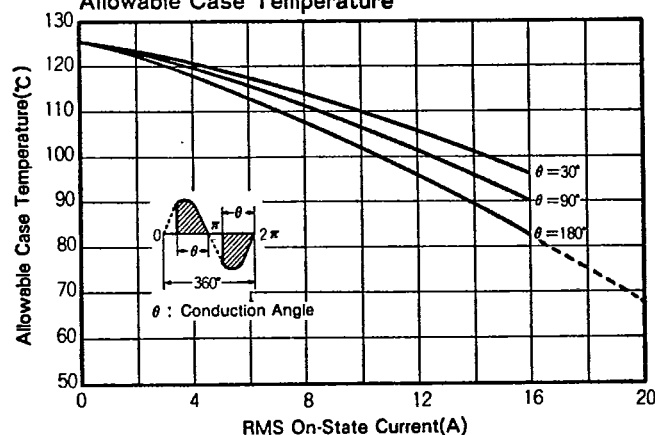
On-State Voltage



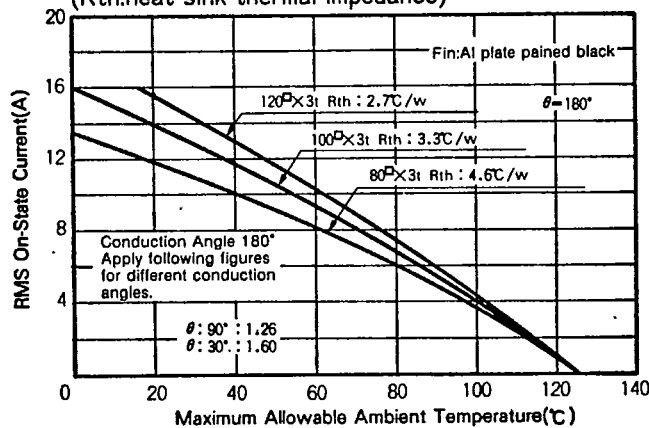
RMS On-State Current vs. Maximum Power Dissipation



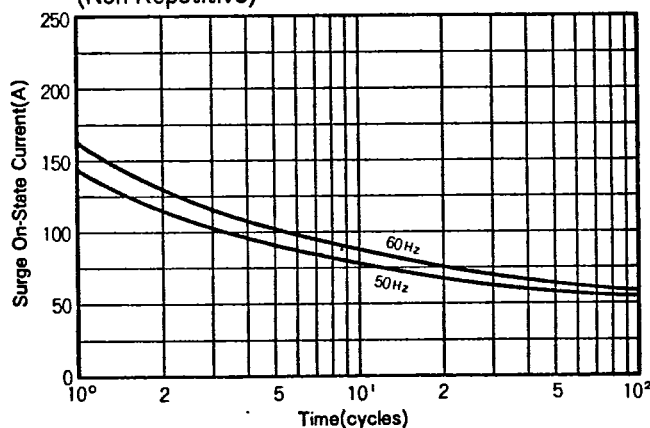
RMS On-State Current vs. Allowable Case Temperature



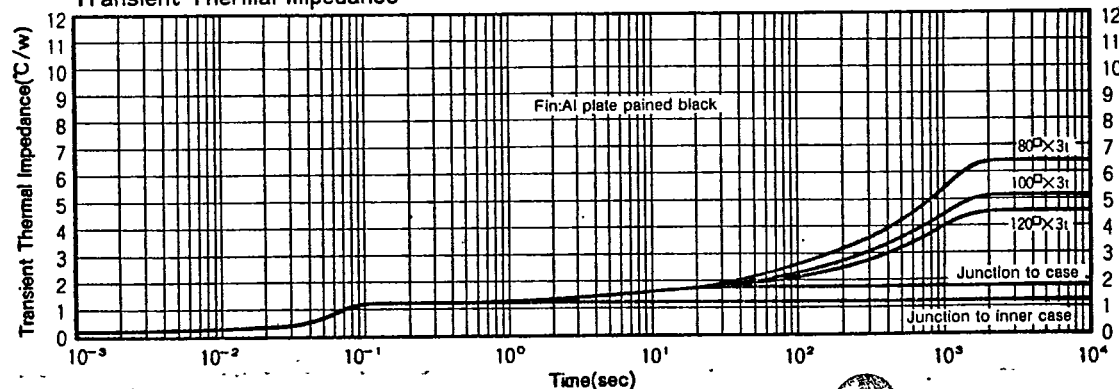
Ambient Temp. vs. RMS On-State Current (Rth: heat sink thermal impedance)



Surge On-State Current Rating (Non-Repetitive)



Transient Thermal Impedance



DIMENSIONS

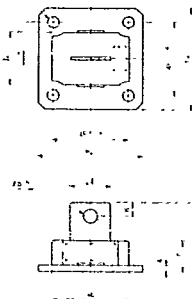
IT IS FOR YOUR REFERENCE.
PLEASE SEE INDIVIDUAL CATALOG OR SPECIFICATIONS FOR FURTHER DETAILS.



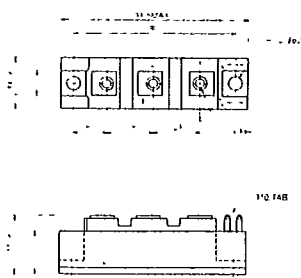
SanRex®**DIMENSIONS****DIMENSIONS**

(m/m)

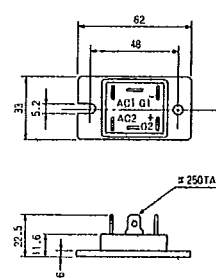
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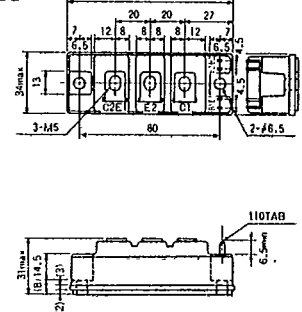
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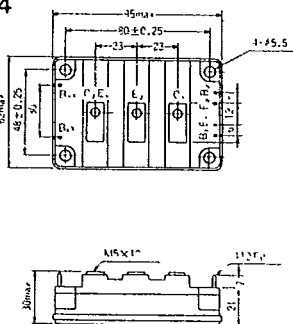
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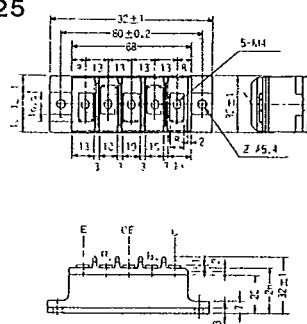
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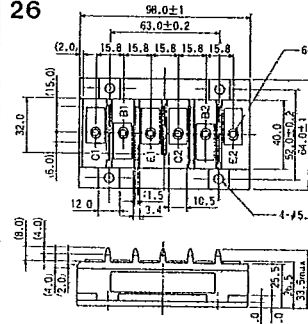
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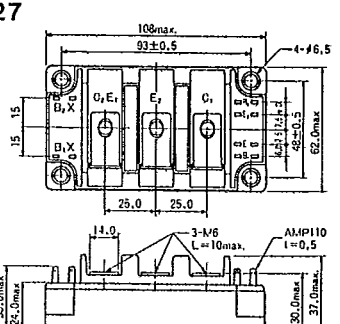
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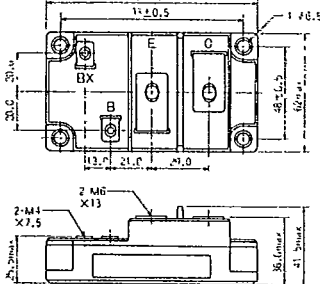
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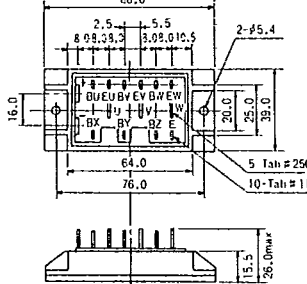
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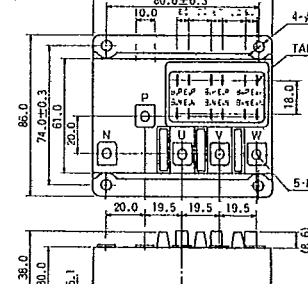
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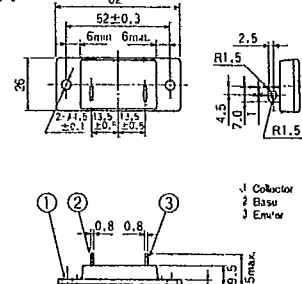
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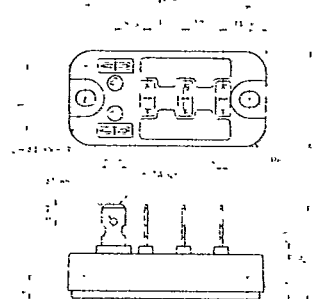
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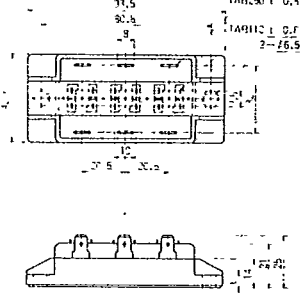
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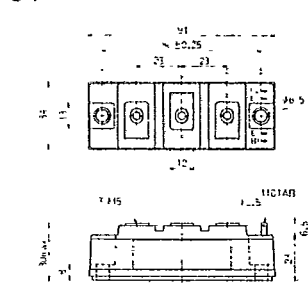
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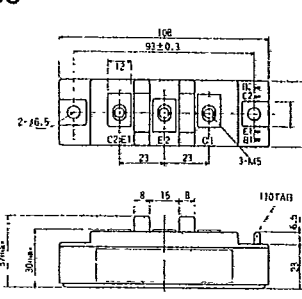
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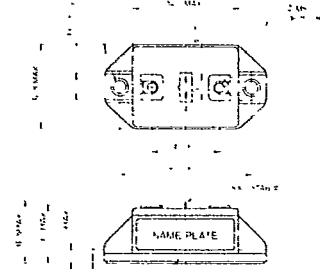
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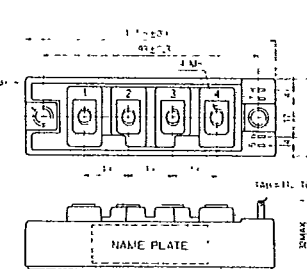
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