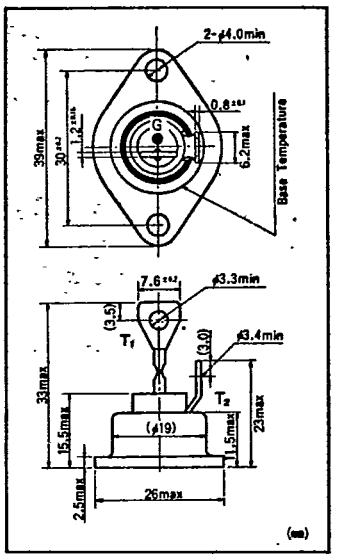
T-25-17

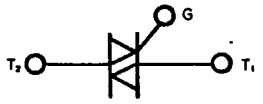
ISOLATED TYPE TRIAC SSG35C-Y

1704

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
- $I_{T(RMS)}$=35A
- High voltage up to 600V
- High surge current of 330A
- Package types; diamond





Maximum Ratings

Item	Symbol	Unit	SSG35C 20Y	SSG35C 30Y	SSG35C 40Y	SSG35C 50Y	SSG35C 60Y
Repetitive Peak Off-State Voltage	V_{DRM}	V	200	300	400	500	600

Item	Symbol	Unit	Rating	Reference
RMS On-State Current	$I_{T(RMS)}$	A	35	Tc=62℃
Surge On-State Current	I_{TSM}	A	300/330	One cycle 50/60Hz, peak, non-repetitive
I^2t(for fusing)	I^2t	A^2S	450	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 Tj=25℃ V_D=½V_{DRM} dI_G/dt=1A/μs
Isolation Breakdown Voltage(R.M.S.)	V_{ISO}	V	2,500	A.C.1minute
Operating Junction Temperature	Tj	℃	−25~+125	
Storage Temperature	Tstg	℃	−25~+125	
Mounting Torque		kgf·cm	12	Recommended 10kgf·cm
Mass		g	22	Excluding bolt, nut and wrapping material

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	1.4	I_T=50A Tj=25℃ Inst. measurement
Gate Trigger Current, max.	1	I_{GT1}^{+}	mA	50	Tj=25℃ I_T=1A V_D=6V
	2	I_{GT1}^{-}	mA	50	Tj=25℃ I_T=1A V_D=6V
	3	I_{GT3}^{+}	mA	—	
	4	I_{GT3}^{-}	mA	50	Tj=25℃ I_T=1A V_D=6V
Gate Trigger Voltage, max.	1	V_{GT1}^{+}	V	3	Tj=25℃ I_T=1A V_D=6V
	2	V_{GT1}^{-}	V	3	Tj=25℃ I_T=1A V_D=6V
	3	V_{GT3}^{+}	V	—	
	4	V_{GT3}^{-}	V	3	Tj=25℃ I_T=1A V_D=6V
Non-Trigger Gate Voltage, min.		V_{GD}	V	0.2	Tj=125℃ V_D½V_{DRM}
Turn On Time, max.		tgt	μs	10	I_T=35A I_G=100mA V_D=½V_{DRM} Tj=25℃ dI_G/dt=1A/μs
Critical Rate of Rise of Off-State Voltage, min.		dv/dt	V/μs	20	Tj=125℃, V_D=⅔V_{DRM} Exponential wave.
Critical Rate of Rise of Off-State Voltage at Commutation, min.		(dv/dt)c	V/μs	5	Tj=125℃, (di/dt)c=15A/ms, V_D=⅔V_{DRM}
Holding Current, typ.		I_H	mA	30	Tj=25℃
Thermal Impedance, max.		Rth	℃/W	1.4	Junction to case

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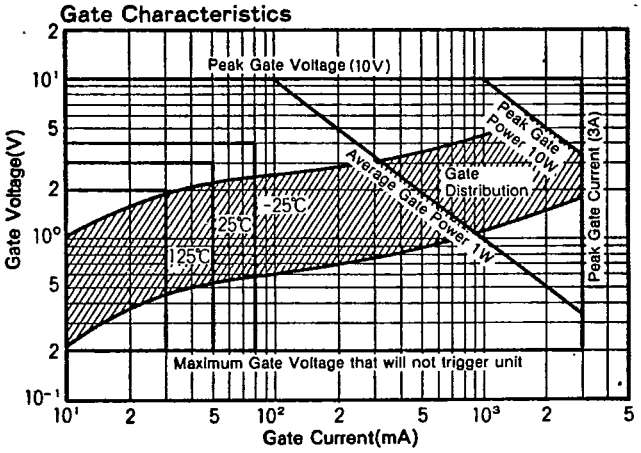
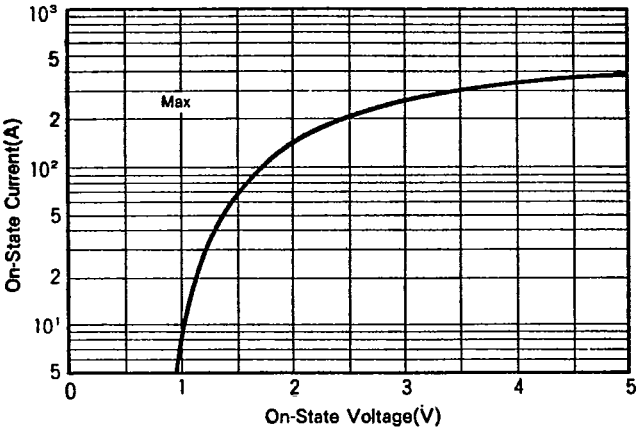
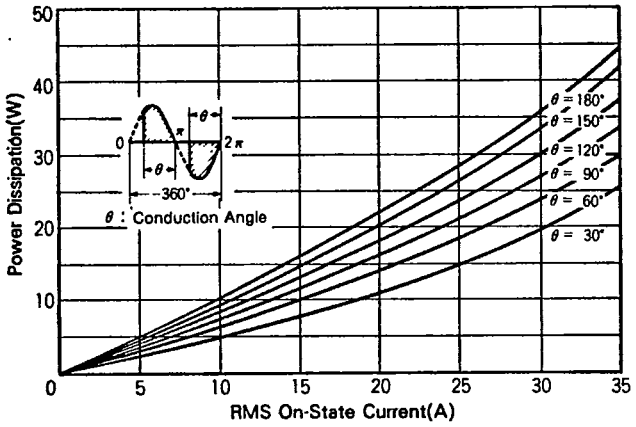
Gate Characteristics



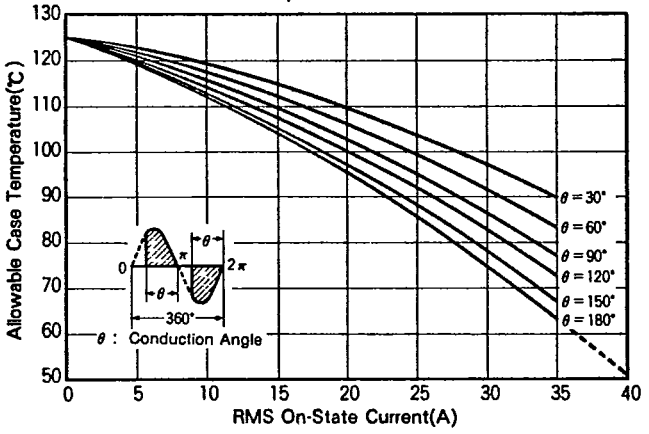
On-State Voltage



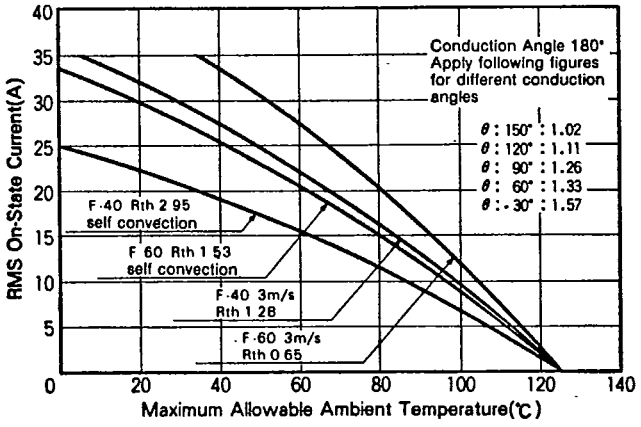
RMS On-State Current vs. Maximum Power Dissipation



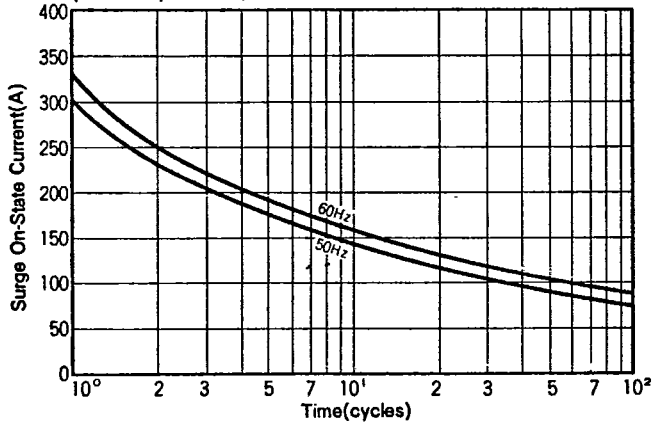
RMS On-State Current vs. Allowable Case Temperature



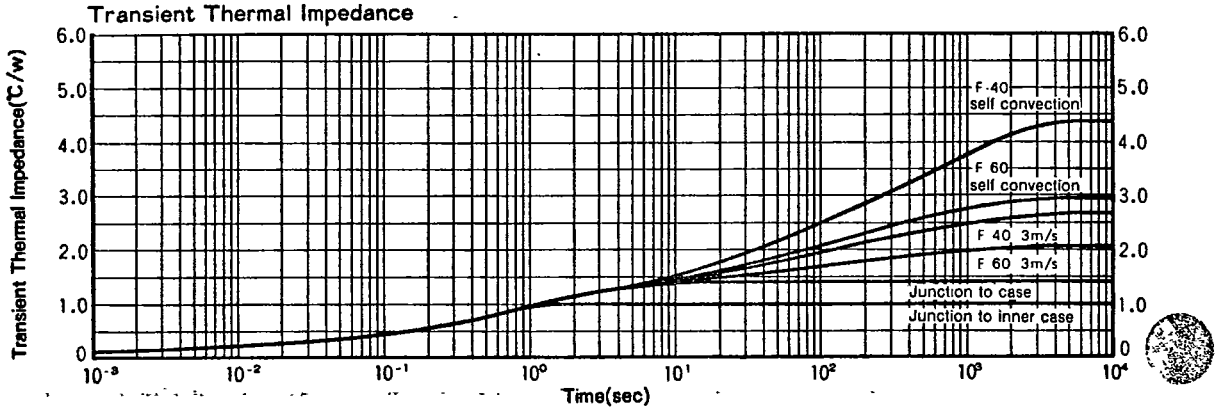
Ambient Temp. vs. RMS On-State Current (Rth:heat sink thermal impedance)



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.

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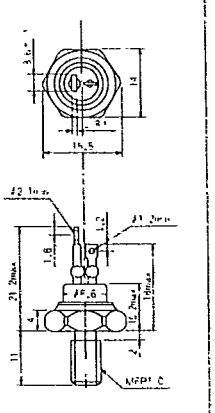

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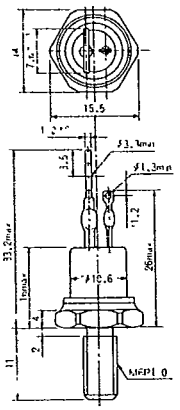

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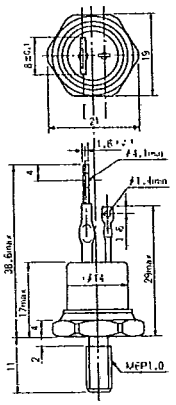

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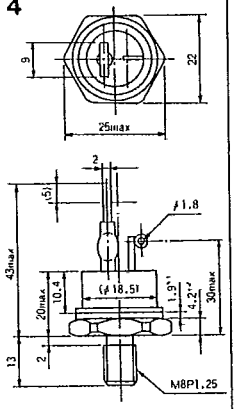

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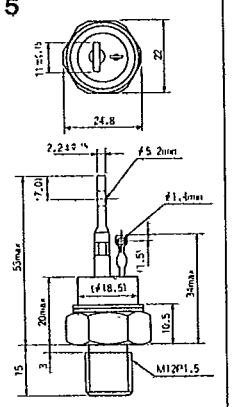

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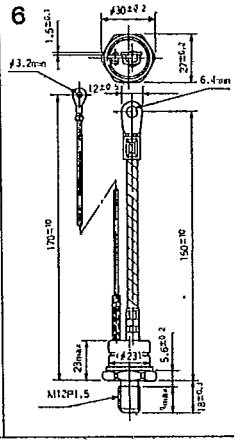

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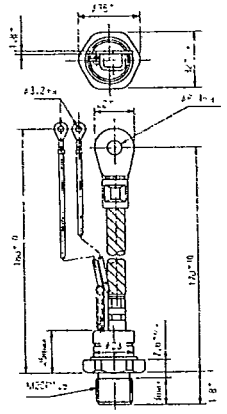

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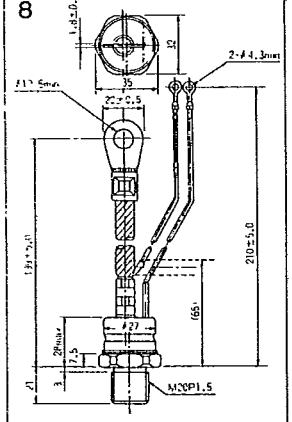

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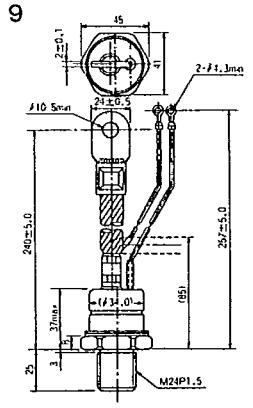

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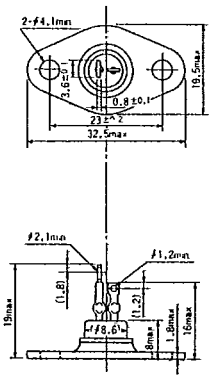

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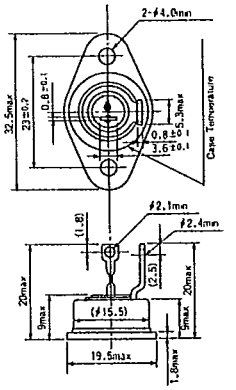

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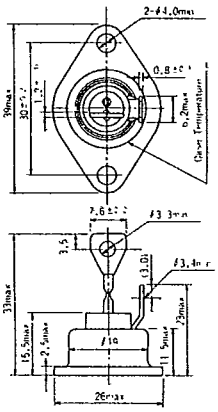

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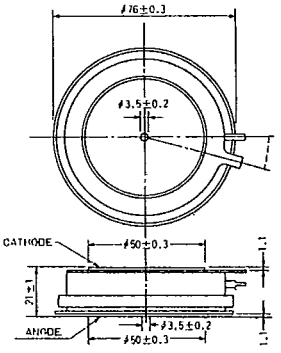

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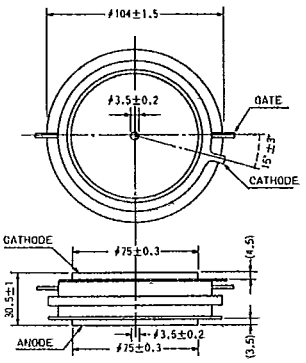

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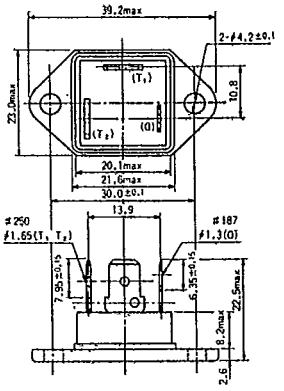

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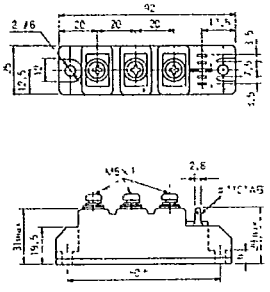

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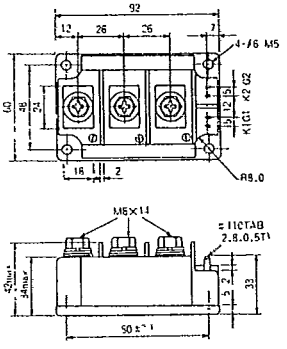

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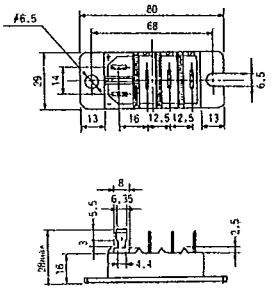

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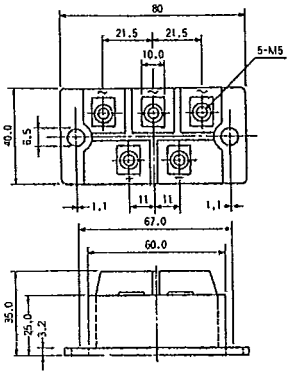

SanRex®

DIMENSIONS

DIMENSIONS

(m/m)

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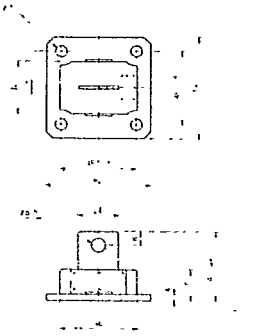

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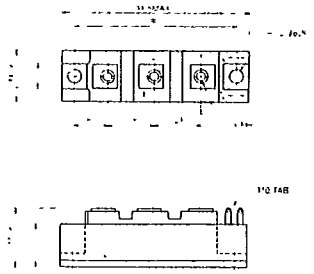

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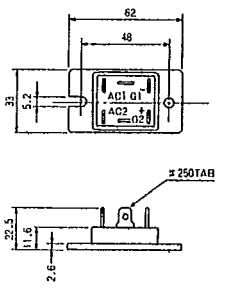

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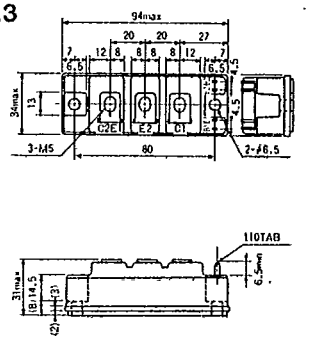

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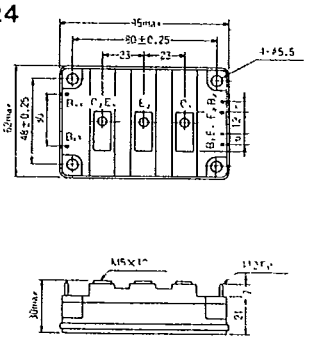

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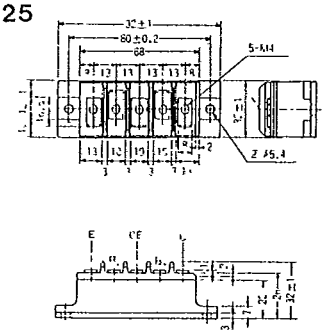

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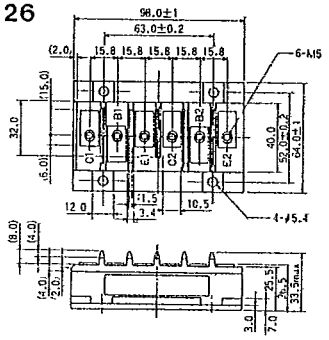

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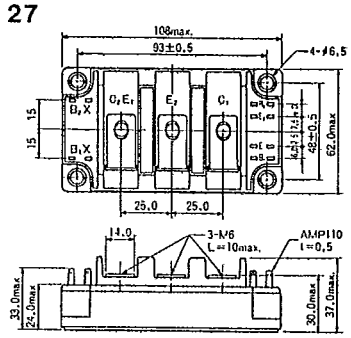

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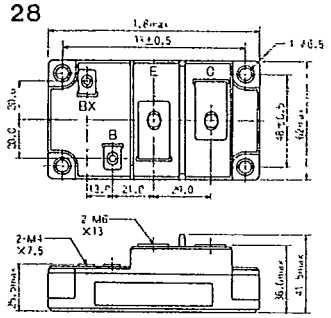

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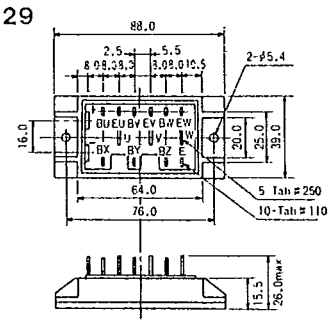

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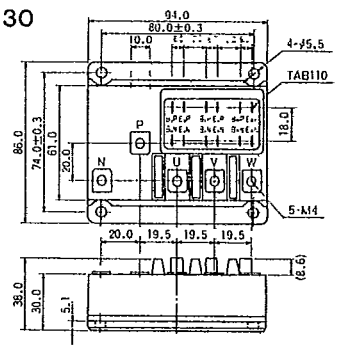

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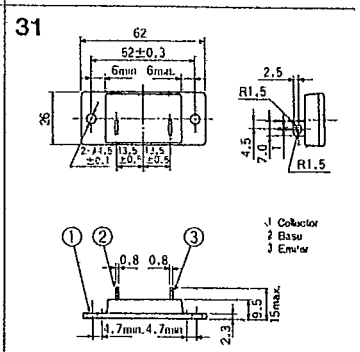

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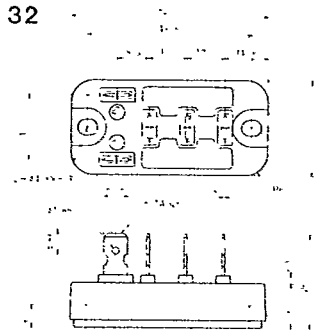

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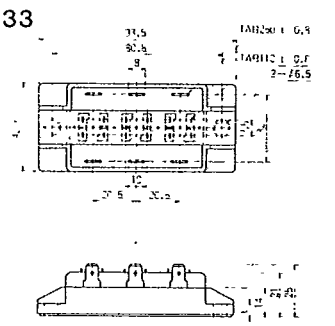

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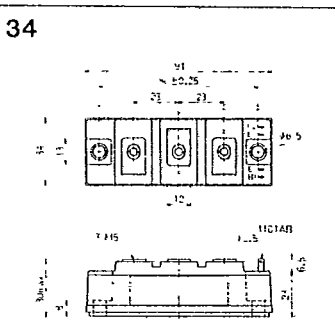

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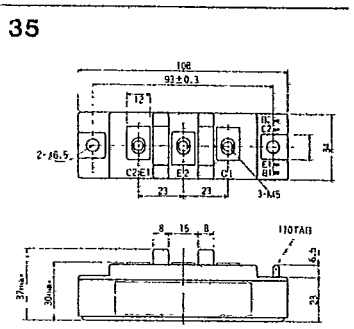

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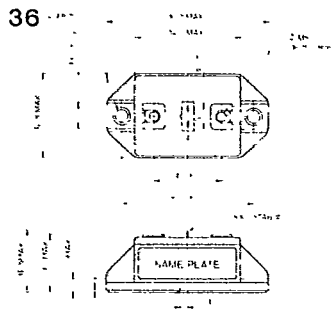

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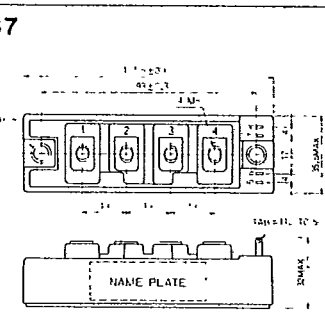

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