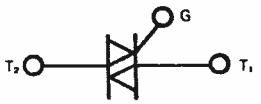
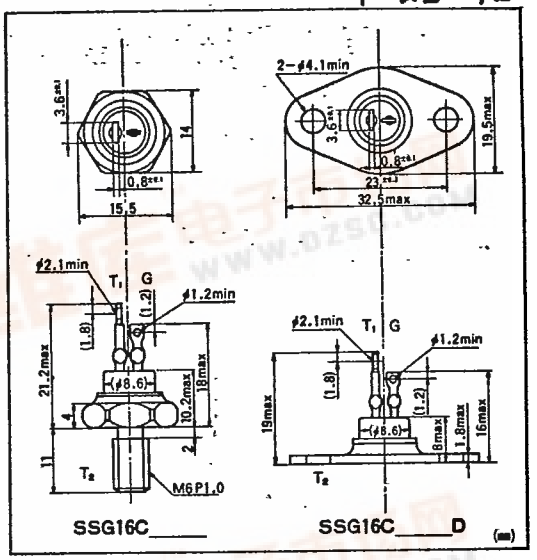
T-25-15

TRIAC SSG16C

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; stud and diamond





■Maximum Ratings

Item	Symbol	Unit	SSG16C 20(D)	SSG16C 30(D)	SSG16C 40(D)	SSG16C 50(D)	SSG16C 60(D)	SSG16C 80(D)	SSG16C 100(D)	SSG16C 120(D)
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	Tc=96℃
Surge On-State Current	I_{TSM}	A	140/160	One cycle 50/60Hz, peak, non-repetitive
I^2t(for fusing)	I^2t	A^2S	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 Tj=25℃ V_D=½V_{DRM} dI_G/dt=1A/μs
Operating Junction Temperature	Tj	℃	−30~+125	
Storage Temperature	Tstg	℃	−30~+125	
Mounting Torque		kgf·cm	15	Recommended 12kgf·cm
Mass		g	11.0 (D type) 8.3	Excluding nut & washer. 2.6g. and wrapping material 0.1g

■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 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_D=½V_{DRM}
Turn On Time, max.		tgt	μs	10	I_T=16A I_G=100mA V_D=½V_{DRM} Tj=25℃ dI_G/dt=1A/μs
Critical Rate of Off-State Voltage, min.		dv/dt	V/μs	50	Tj=125℃, V_D=⅔V_{DRM} Exponential wave.
Critical Rate of Off-State Voltage at Commutation, min.		[dv/dt]c	V/μs	6	Tj=125℃, [di/dt]c= 8 A/ms, V_D=⅔V_{DRM}
Holding Current, typ.		I_H	mA	30	Tj=25℃

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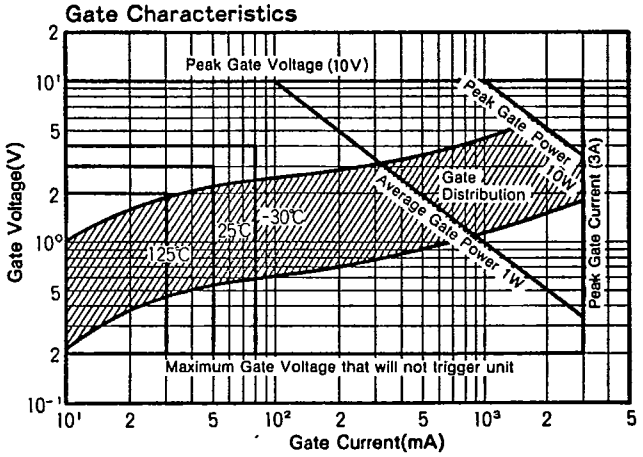
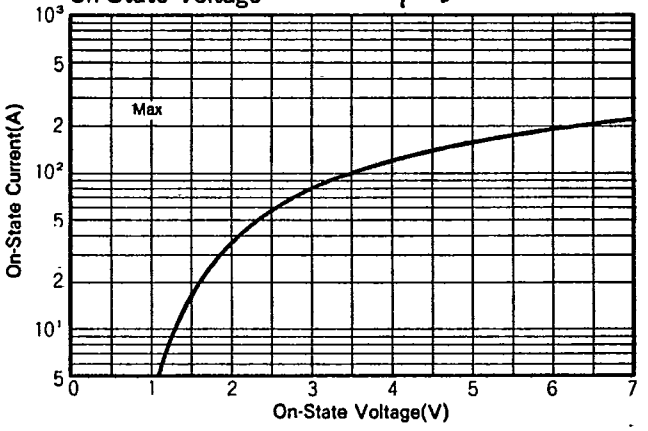
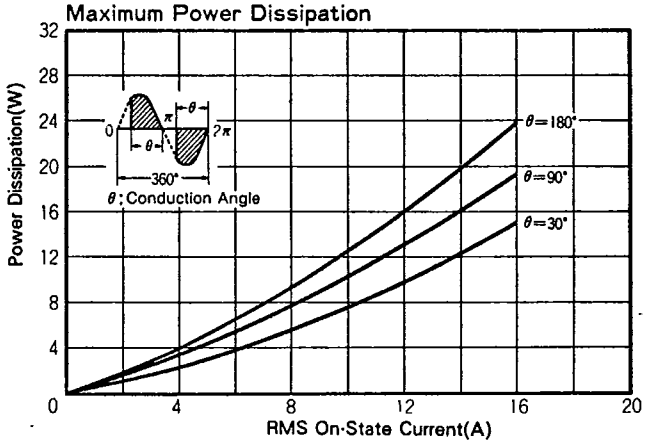
Gate Characteristics



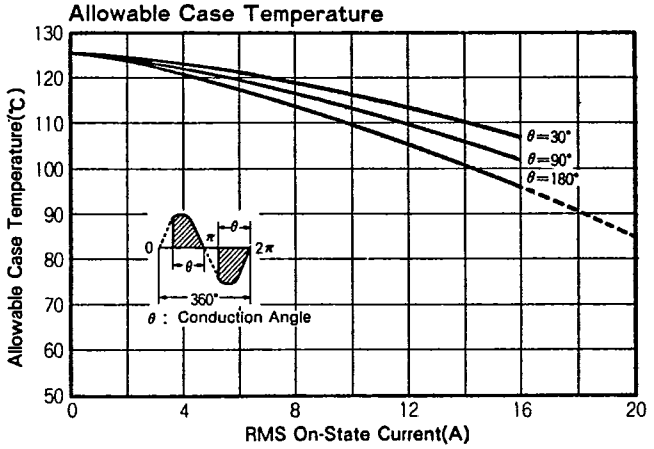
On-State Voltage



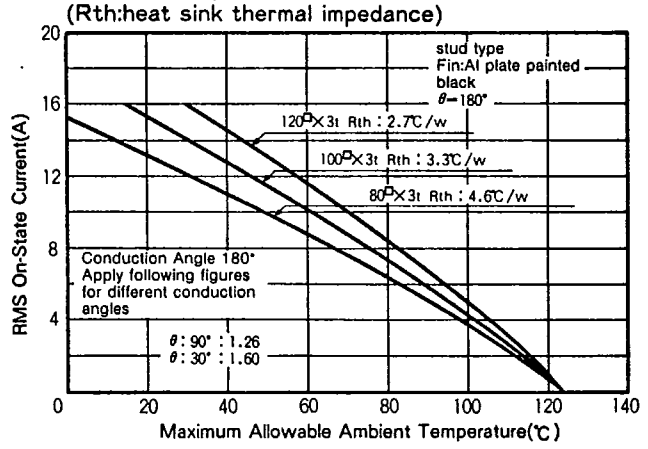
RMS On-State Current vs. Maximum Power Dissipation



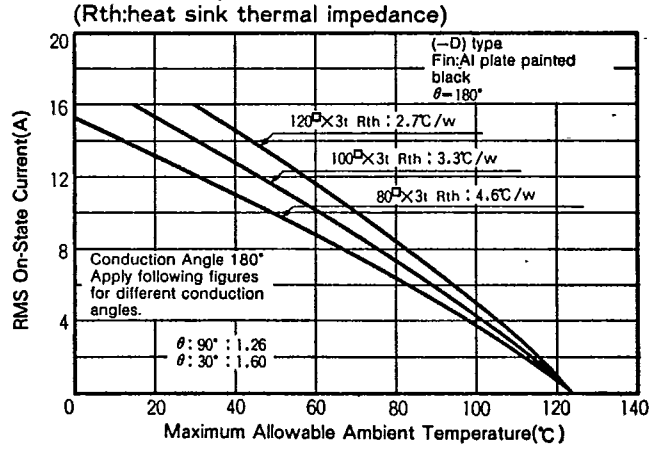
RMS On-State Current vs. Allowable Case Temperature



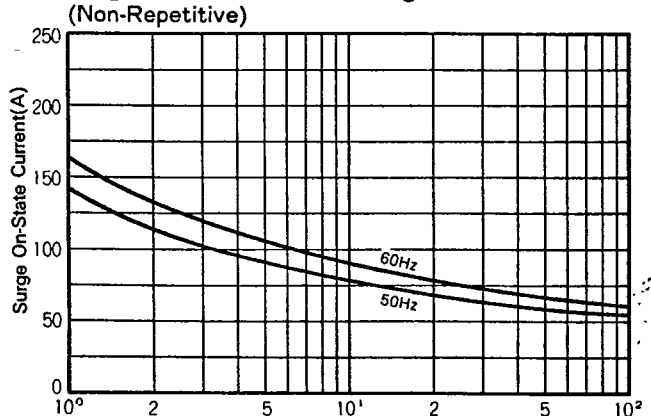
Ambient Temp. vs. RMS On-State Current (Rth:heat sink thermal impedance)



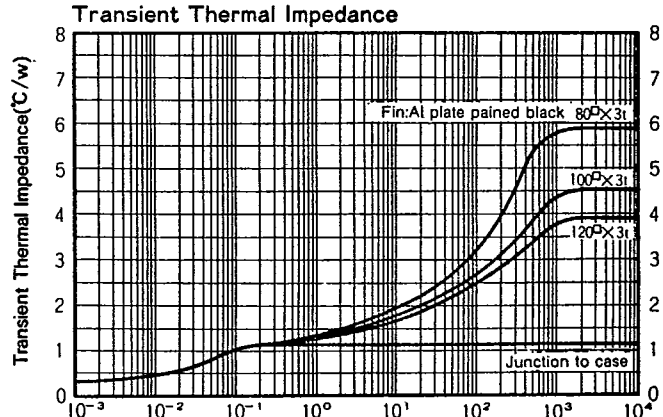
Ambient Temp. vs. RMS On-State Current (Rth:heat sink thermal impedance)



Surge On-State Current Rating (Non-Repetitive)



Transient Thermal Impedance



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DIMENSIONS

T-91-20

DIMENSIONS

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

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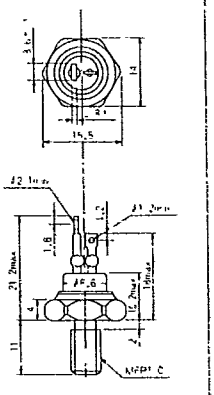

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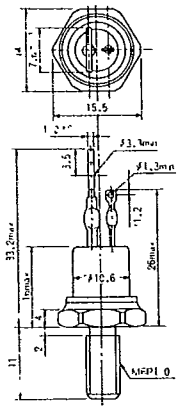

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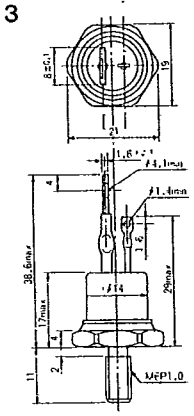

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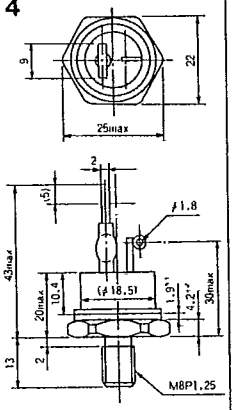

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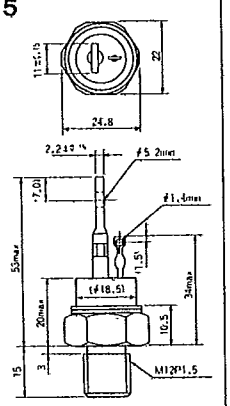

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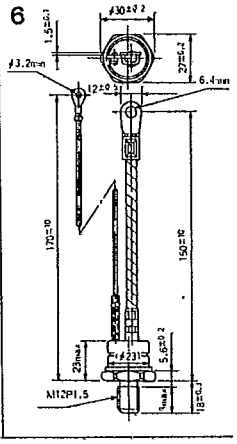

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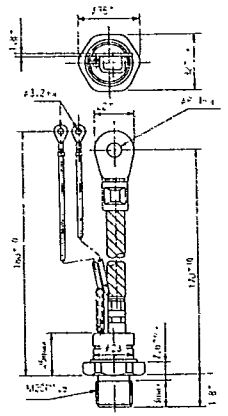

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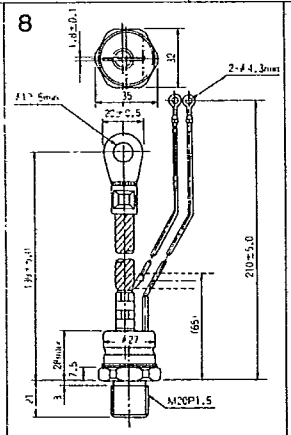

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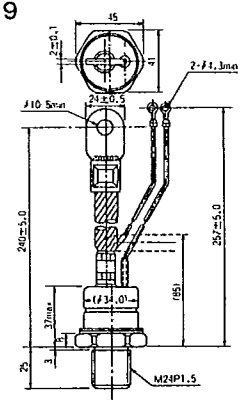

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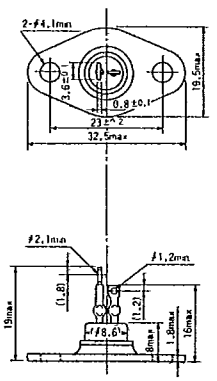

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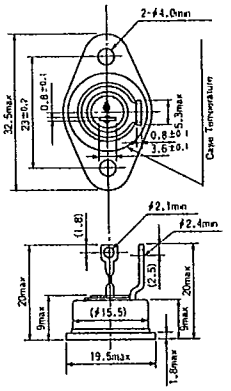

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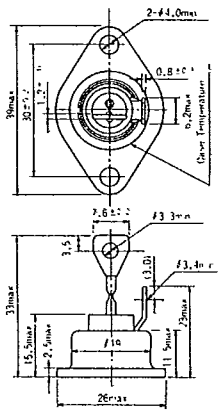

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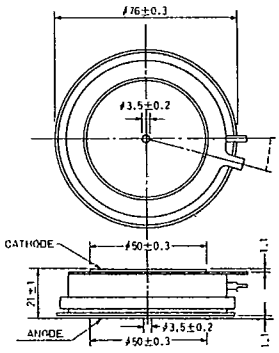

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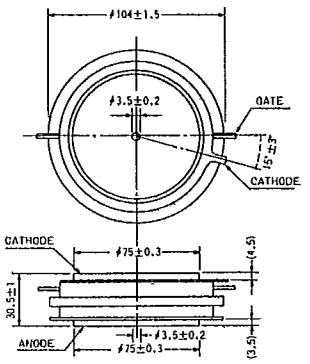

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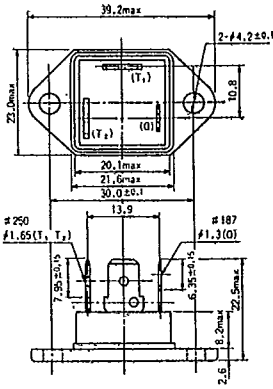

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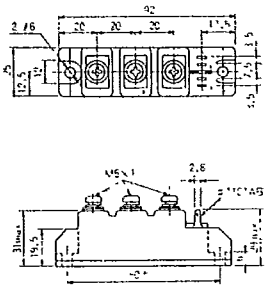

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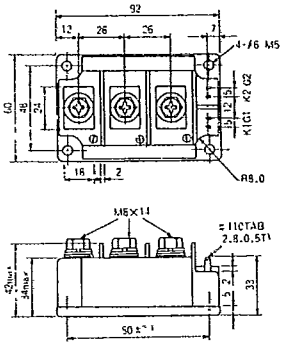

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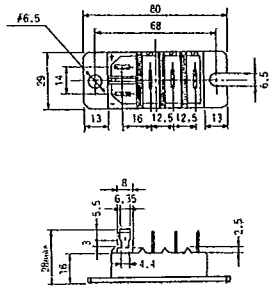

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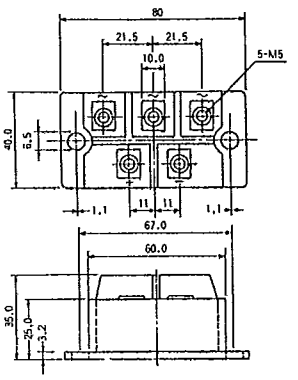

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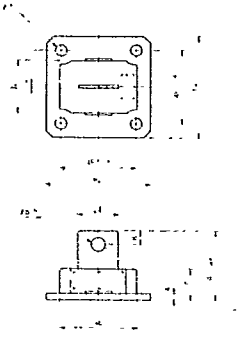
DIMENSIONS

DIMENSIONS

(m/m)

20



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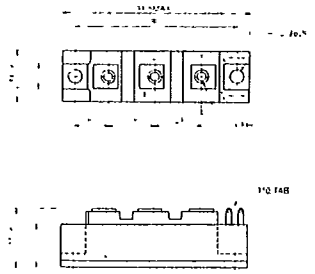

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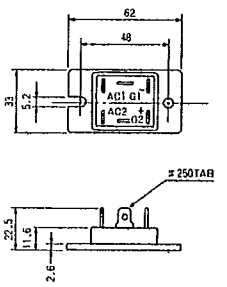

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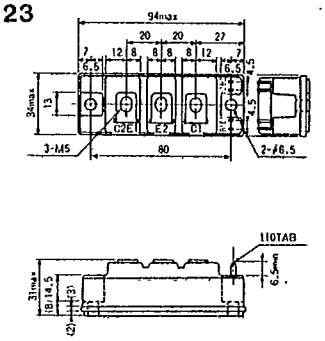

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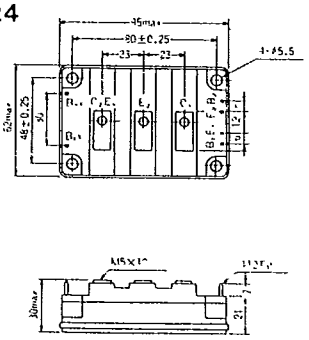

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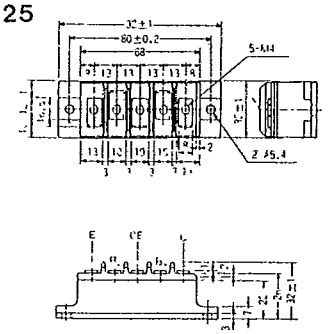

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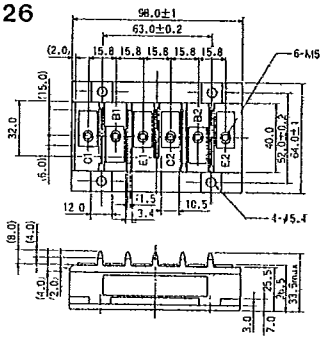

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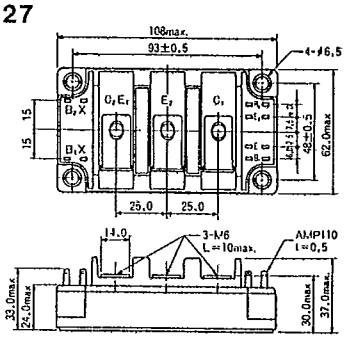

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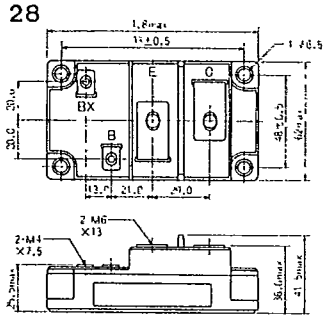

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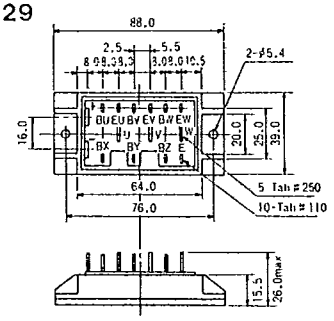

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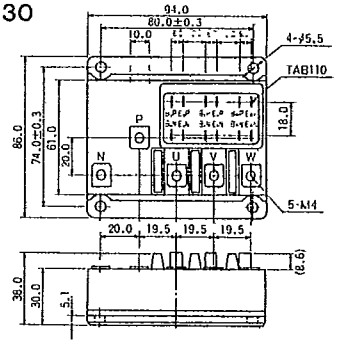

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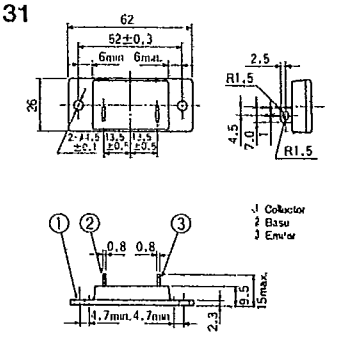

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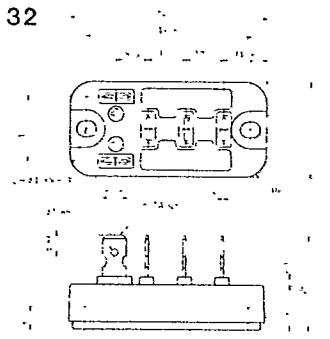

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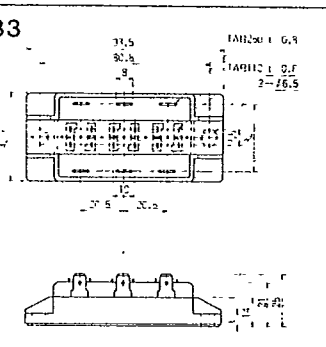

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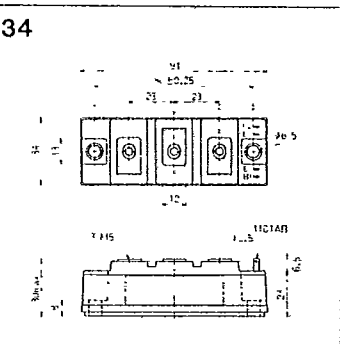

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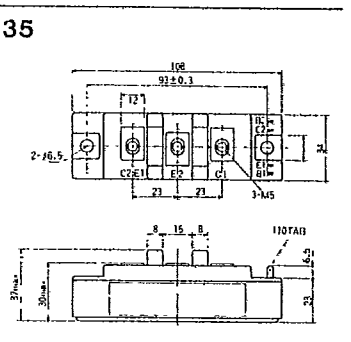

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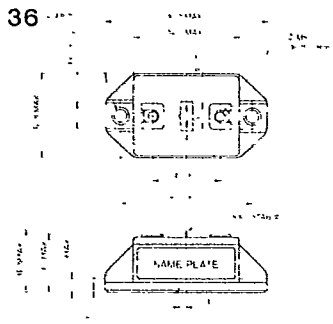

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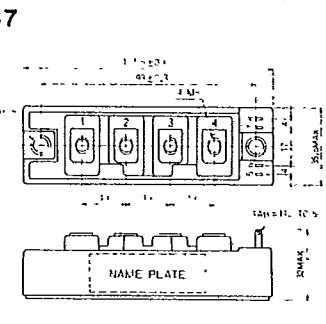

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