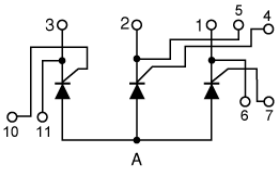
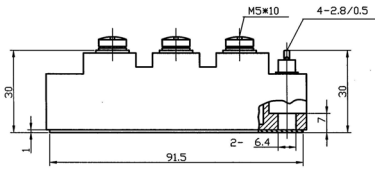
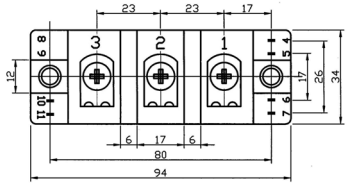
3TA100GKxxNB

Three Phase Half Bridge



Dimensions in mm (1mm = 0.0394")





Type	V_{RSM} V	V_{RRM} V
3TA100GK03NB	400	300
3TA100GK04NB	500	400

Symbol	Test Conditions	Maximum Ratings	Unit
$I_{T(AV)}$ $I_{T(RMS)}$	Single phase, half wave, 180°C conduction, T_C=114°C	100 157	A
I_{TSM}	1/2cycle, 50Hz/60Hz, peak value, non-repetitive	3200/3500	A
I^2t		51000	A^2s
P_{GM} $P_{G(AV)}$		10 1	W
I_{FGM}		3	A
V_{FGM} V_{RGM}		10 5	V
di/dt	I_G=200mA, Tj=25°C, V_D=1/2V_{DRM}, dI_G/dt=1A/us	50	A/us
T_{VJ} T_{VJM} T_{stg}		-30...+150 150 -30...+125	°C
Ms Mt	to heatsink M6 to terminals M5	3 ~ 5 2.5 ~ 5	Nm
Weight		160	g

Sirectifier®

3TA100GKxxNB

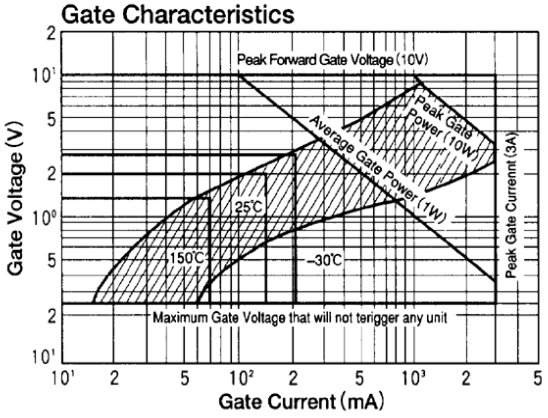
Three Phase Half Bridge

Symbol	Test Conditions	min.	typ.	max.	Unit
I_{DRM} I_{RRM}	at V_{DRM}, single phase, half wave, Tj=150°C			15 15	mA
V_{TM}	On-State Current 310A, Tj=25°C Inst. measurement			1.20	V
I_{GT}/V_{GT}	Tj=25°C, I_T=1A, V_D=6V			75	mA/V
V_{GD}	Tj=150°C, V_D=1/2V_{DRM}	0.25			V
tgt	I_T=100A, I_G=200mA, Tj=25°C, V_D=1/2V_{DRM}, dI_G/dt=1A/us			10	us
dv/dt	Tj=150°C, V_D=2/3V_{DRM}, Exponential wave	500			V/us
I_H	Tj=25°C		70		mA
R_{thJC}	Junction to case (1/3 Module)			0.3	°C/W

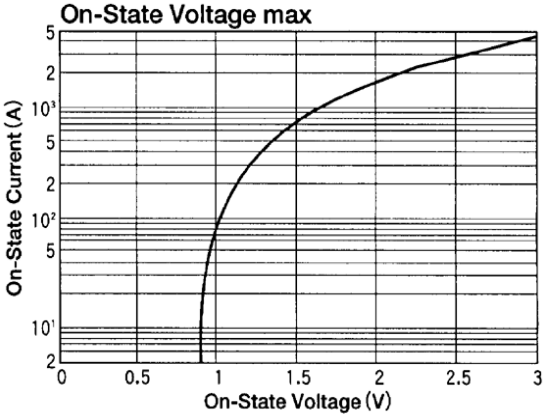
3TA100GKxxNB

Three Phase Half Bridge

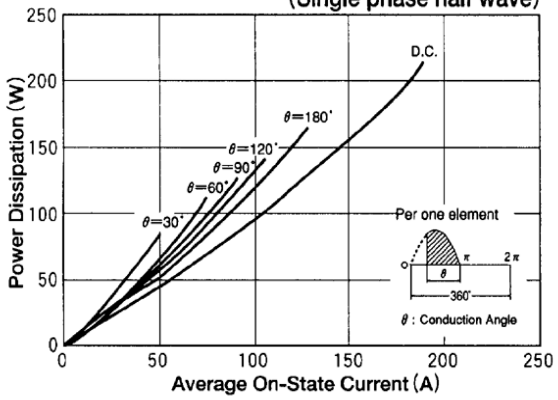
Gate Characteristics



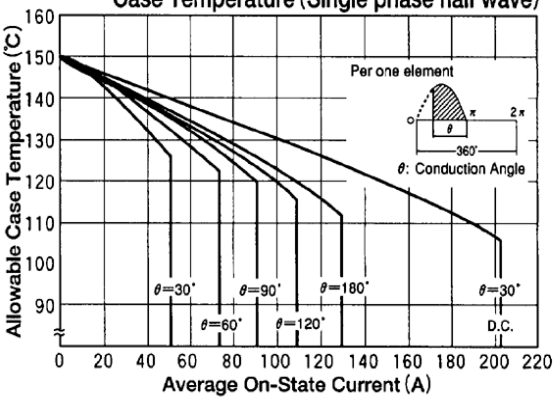
On-State Voltage max



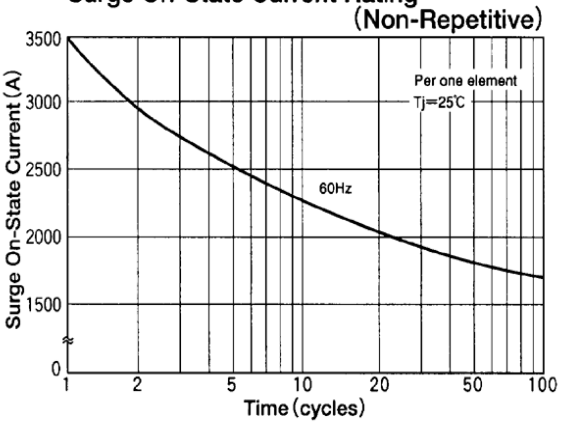
Average On-State Current Vs Power Dissipation (Single phase half wave)



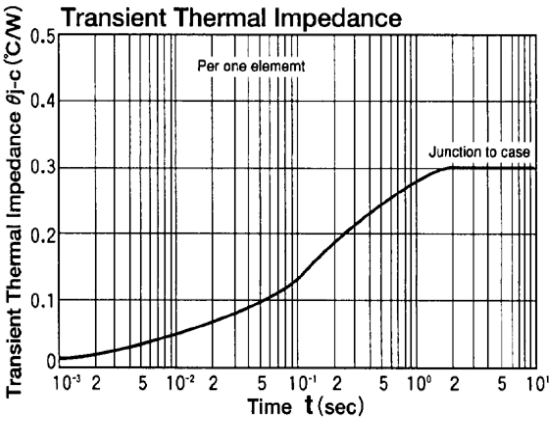
Average On-State Current Vs Maximum Allowable Case Temperature (Single phase half wave)



Surge On-State Current Rating (Non-Repetitive)



Transient Thermal Impedance



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