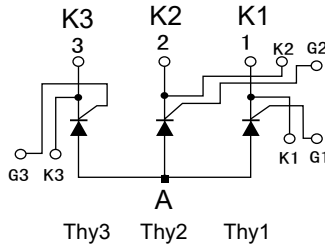
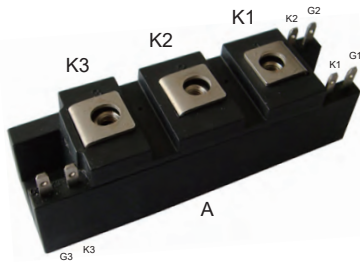
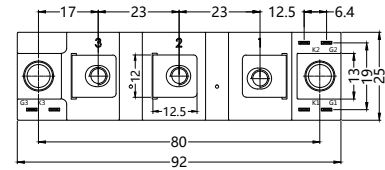
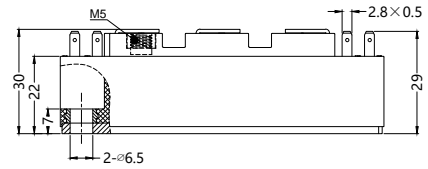


3TA100GK04NB-B

Three Phase Thyristor Module (Half Bridge)



Dimensions in mm (1mm = 0.0394")



Type	V _{RSM} V	V _{RRM} V
3TA100GK03NB-B	400	300
3TA100GK04NB-B	500	400
3TA100GK06NB-B	700	600



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 ² t		51000	A ² s
P _{GM} P _{G(AV)}		10 1	W
I _{FGM}		3	A
V _{FGM} V _{RGM}		10 5	V
di/dt	I _G =150mA, T _j =25°C, V _D =1/2V _{DRM} , diG/dt=1A/us	60	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		169	g

Sirectifier®

3TA100GK04NB-B

Three Phase Thyristor Module (Half Bridge)

Symbol	Test Conditions	min.	typ.	max.	Unit
I_{DRM} I_{RRM}	at V _{DRM} , single phase, half wave, T _j =150°C			15 15	mA
V_{TM}	On-State Current 314A, T _j =25°C Inst. measurement			1.25	V
I_{GT}	T _j =25°C, I _T =1A, V _D =6V			150	mA
V_{GD}	T _j =150°C, V _D =1/2V _{DRM}	0.25			V
t_{gt}	I _T =100A, I _G =200mA, T _j =25°C, V _D =1/2V _{DRM} , di _G /dt=1A/us			10	us
dv/dt	T _j =150°C, V _D =2/3V _{DRM} , Exponential wave	150			V/us
I_H	T _j =25°C		100		mA
R_{thJC}	Junction to case (1/3 Module)			0.30	°C/W

FEATURES

- * International standard package
- * Copper base plate
- * Glass passivated chips
- * RoHS compliant

APPLICATIONS

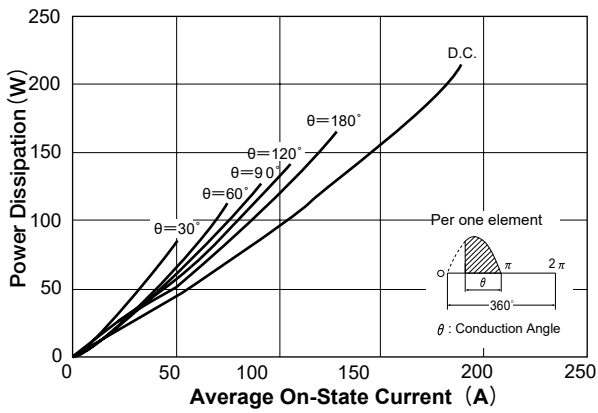
- * Welding Machine Power Supply
- * DC Power Supply

ADVANTAGES

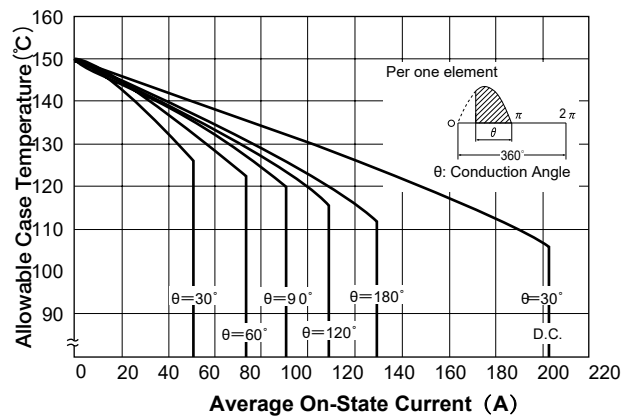
- * Space and weight savings
- * Simple mounting with two screws
- * Improved temperature and power cycling
- * Reduced protection circuits

3TA100GK04NB-B

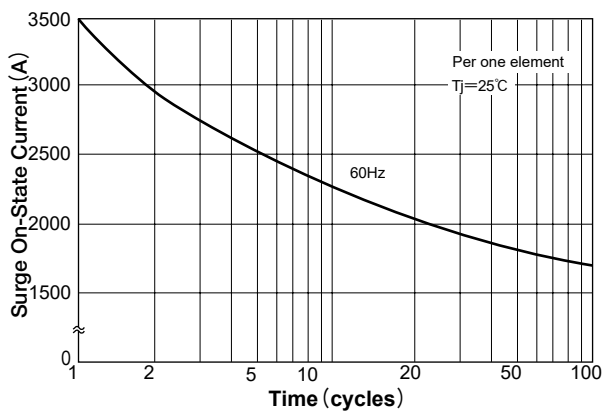
Three Phase Thyristor Module (Half Bridge)



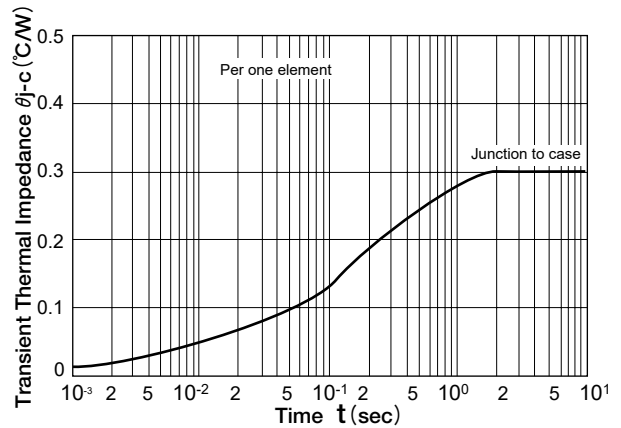
Average On-State Current Vs Power Dissipation



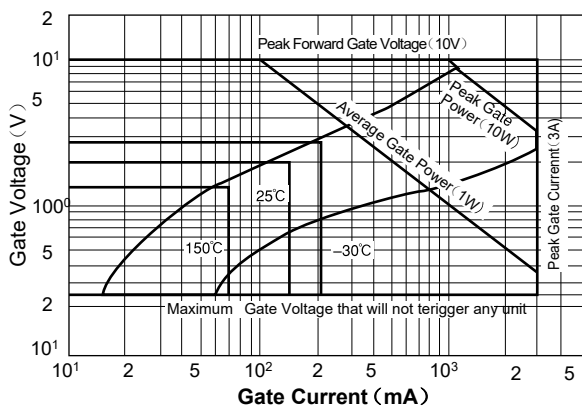
Average On-State Current Vs Maximum Allowable Case Temperature (Single phase half wave)



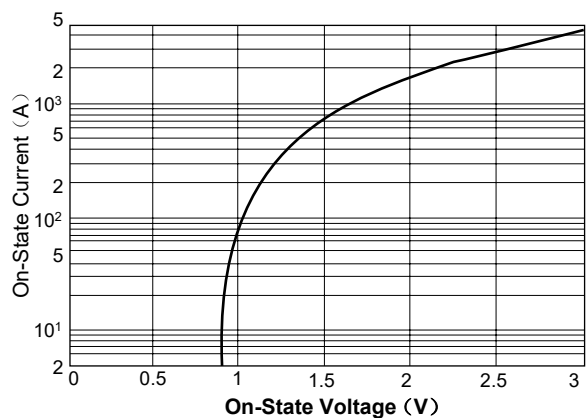
Surge On-State Current Rating (Single phase half wave) (Non-Repetitive)



Transient Thermal Impedance



Gate Characteristics



On-State Voltage max