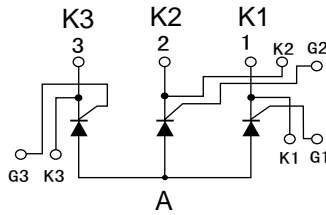
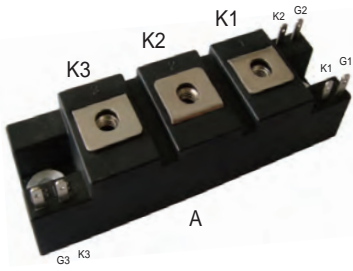
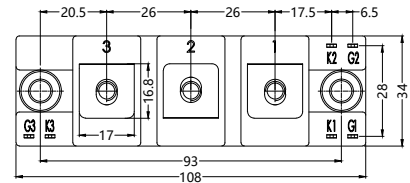
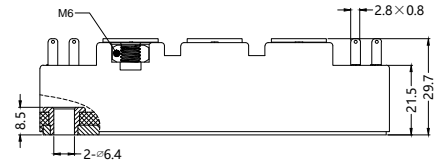


# 3TA150GKxxNB

## Three Phase Thyristor Module (Half Bridge)



Dimensions in mm (1mm = 0.0394")



| Type         | V <sub>RSM</sub><br>V | V <sub>RSM</sub><br>V |
|--------------|-----------------------|-----------------------|
| 3TA150GK03NB | 400                   | 300                   |
| 3TA150GK04NB | 500                   | 400                   |



| Symbol  | Test Conditions  | Maximum Ratings                 | Unit             |
|---|--|---------------------------------|------------------|
| I <sub>T(AV)</sub><br>I <sub>T(RMS)</sub>               | Single phase, half wave, 180° conduction, T <sub>c</sub> =114°C  | 150<br>235                      | A                |
| I <sub>TSM</sub>  | 1/2cycle, 50Hz/60Hz, peak value, non-repetitive  | 4000/4400                       | A                |
| I <sup>2</sup> t  |  | 375000                          | A <sup>2</sup> s |
| P <sub>GM</sub><br>P <sub>G(AV)</sub>                   |  | 10<br>1                         | W                |
| I <sub>FGM</sub>  |  | 3                               | A                |
| V <sub>FGM</sub><br>V <sub>RGM</sub>                    |  | 10<br>5                         | V                |
| di/dt   | I <sub>G</sub> =150mA, T <sub>j</sub> =25°C, V <sub>D</sub> =1/2V <sub>DRM</sub> , di <sub>G</sub> /dt=1A/us | 60                              | A/us             |
| T <sub>vj</sub><br>T <sub>vJM</sub><br>T <sub>stg</sub> |  | -30...+125<br>125<br>-30...+125 | °C               |
| Ms<br>Mt  | to heatsink M6<br>to terminals M6  | 3 ~ 5<br>2.5 ~ 5                | Nm               |
| Weight  |  | 210                             | g                |

# 3TA150GKxxNB

## Three Phase Thyristor Module (Half Bridge)

| Symbol   | Test Conditions  | min. | typ. | max.     | Unit |
|--|--|------|------|----------|------|
| <b>I<sub>DRM</sub></b><br><b>I<sub>RDM</sub></b> | at V <sub>DRM</sub> , single phase, half wave, T <sub>j</sub> =125°C   |      |      | 30<br>30 | mA   |
| <b>V<sub>TM</sub></b>                            | On-State Current 450A, T <sub>j</sub> =25°C Inst. measurement  |      |      | 1.25     | V    |
| <b>I<sub>GT</sub></b>                            | T <sub>j</sub> =25°C, I <sub>T</sub> =1A, V <sub>D</sub> =6V   |      |      | 150      | mA   |
| <b>V<sub>GD</sub></b>                            | T <sub>j</sub> =125°C, V <sub>D</sub> =1/2V <sub>DRM</sub>   | 0.25 |      |          | V    |
| <b>t<sub>gt</sub></b>                            | I <sub>T</sub> =100A, I <sub>G</sub> =200mA, T <sub>j</sub> =25°C, V <sub>D</sub> =1/2V <sub>DRM</sub> , di <sub>G</sub> /dt=1A/us |      |      | 10       | us   |
| <b>dv/dt</b>                                     | T <sub>j</sub> =125°C, V <sub>D</sub> =2/3V <sub>DRM</sub> , Exponential wave  | 150  |      |          | V/us |
| <b>I<sub>H</sub></b>                             | T <sub>j</sub> =25°C   |      | 100  |          | mA   |
| <b>R<sub>thJC</sub></b>                          | Junction to case (1/3 Module)  |      |      | 0.16     | °C/W |

### FEATURES

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

### APPLICATIONS

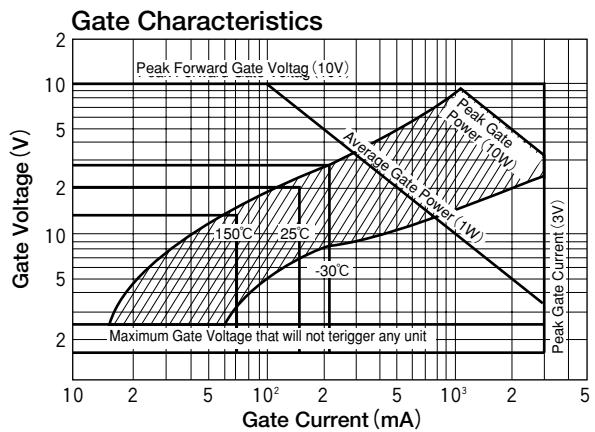
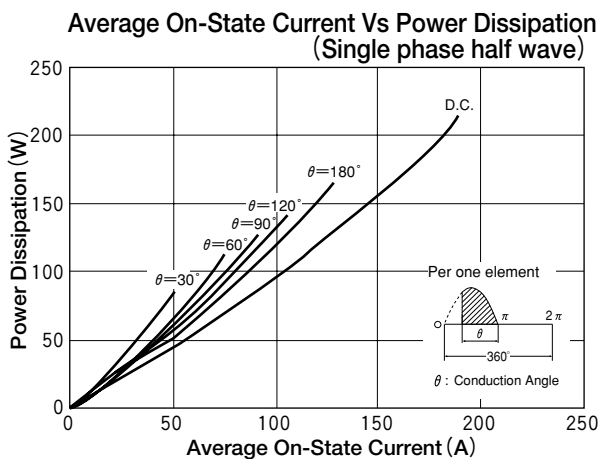
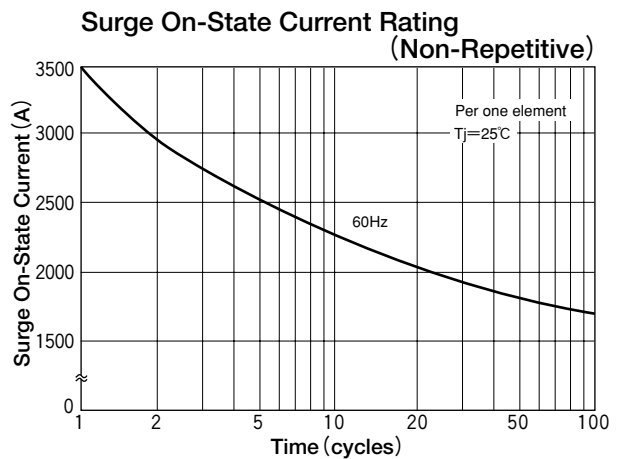
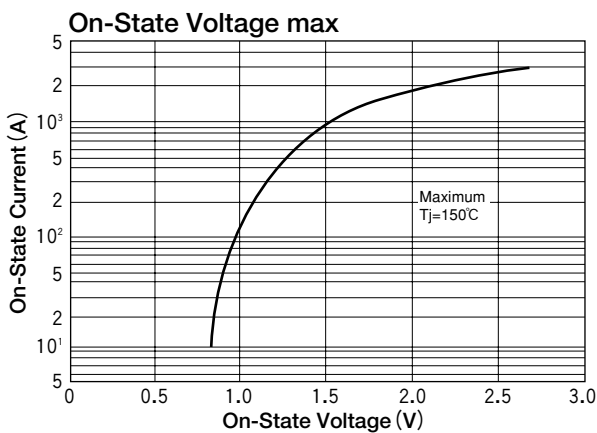
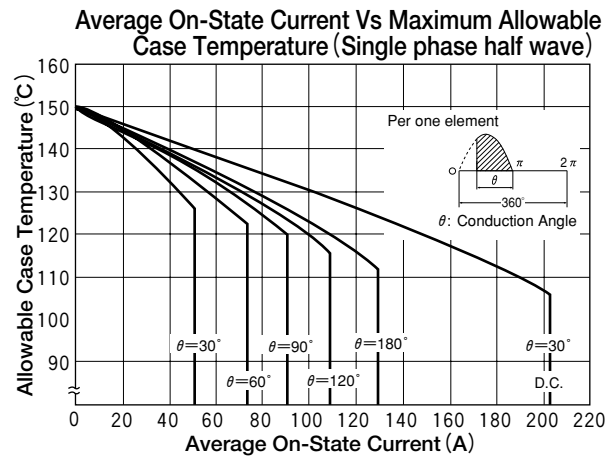
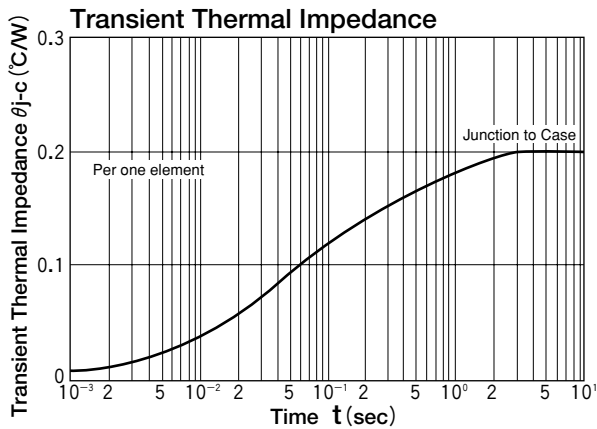
- \* Welding Machine Power Supply
- \* DC Power Supply

### ADVANTAGES

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

# 3TA150GKxxNB

## Three Phase Thyristor Module (Half Bridge)



**Sirectifier®**