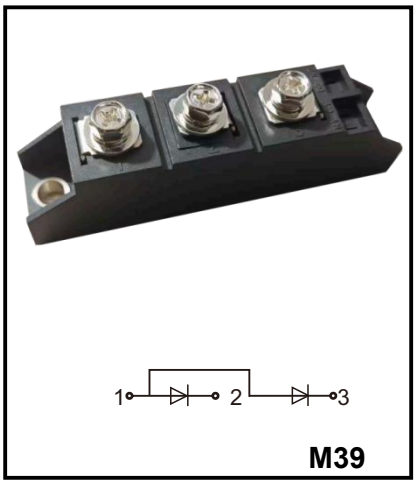
**Rectifier Module**

**$V_{RRM}$ - 1200 to 2000V**

**$I_{(AV)}$ - 90A**




## FEATURES

- Low reverse leakage current
- High surge current capability
- Compliant to RoHS directive 2011/65/EU

## APPLICATIONS

- Industrial power supply
- DC supply for PWM inverter
- Supplies for DC power equipment

## MECHANICAL DATA

- Case: M39
- Polarity: Polarity symbols being marked on body
- Mounting torque: 15.0kgf.cm max

## Maximum Ratings @ Ta = 25℃ unless otherwisenoted

| PARAMETER | | SYMBOL | MDA90-12 | MDA90-14 | MDA90-16 | MDA90-18 | MDA90-20 | UNIT |
|---|---|---|---|---|---|---|---|---|
| Maximum recurrent peak reverse voltage | | $V_{RRM}$ | 1200 | 1400 | 1600 | 1800 | 2000 | V |
| Average rectifiedoutputcurrent | with heatsink, $T_C$=100℃ | $I_{(AV)}$ | 90 | | | | | A |
| Peak surge forward curre,nt8.3ms single half Sine-wave superimposed on rated load | | $I_{FSM}$ | 1000 | | | | | A |
| Rating for fusing,1ms<t<8.3ms Tj=25℃, Rating of per diode | | $I^2t$ | 11200 | | | | | $A^2s$ |
| Dielectric strengt,hterminals to case AC 1 minute | | $V_{dis}$ | 2.5 | | | | | KV |
| Peak Forward Voltage $I_F$ =90A | | $V_F$ | 1. 2 | | | | | V |
| Peak Reverse Current $V_R$=$V_{RRM}$ , Pulse measurementRating of per diode | Tj=25℃ | $I_R$ | 0.5 | | | | | mA |
| | Tj=125℃ | | 10 | | | | | |
| Junction to case hermalresistance, with heatsink | | $R_{\theta JC}$ | 0.18 | | | | | °C/W |
| Junction temperature | | $T_J$ | -40～+150 | | | | | °C |
| Storage temperature | | $T_{STG}$ | -40～+125 | | | | | °C |

## Characteristic Curve

FIG 1 .Derating Curve For Output Rectified Current

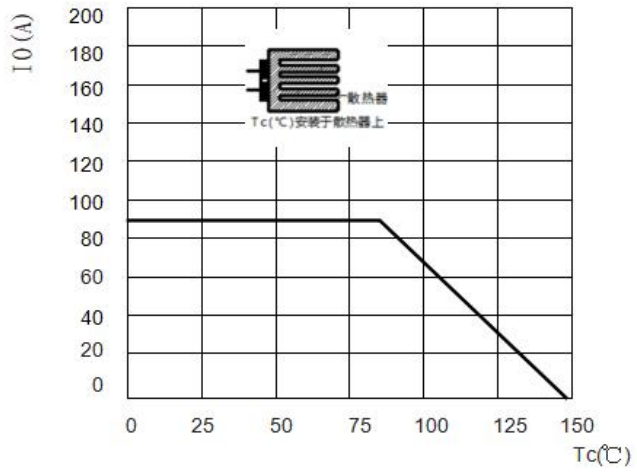



FIG2 .Maximum Non-Repetitive Peak ForwardSurge CurrentPer Bridge Element

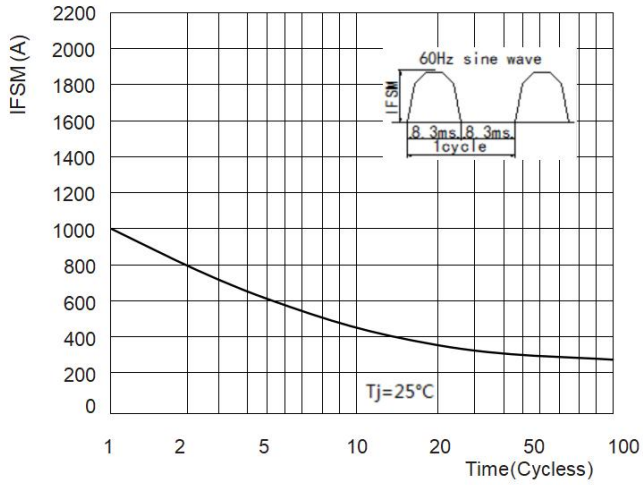



FIG3.Typical Reverse Characteristics Per Bridge Element

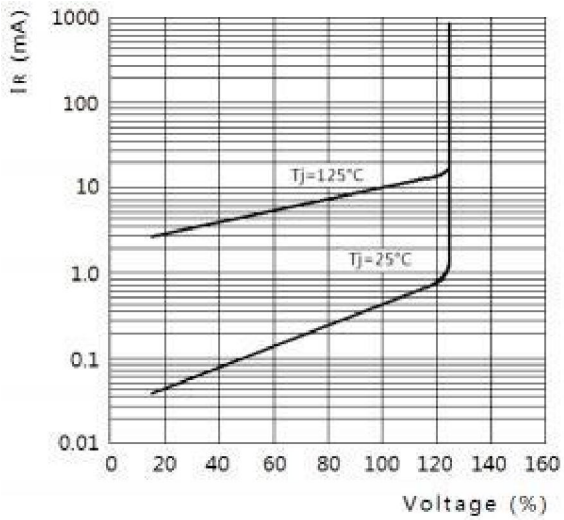
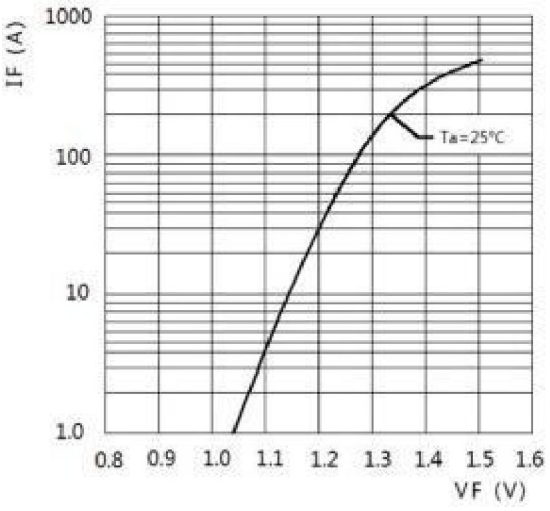
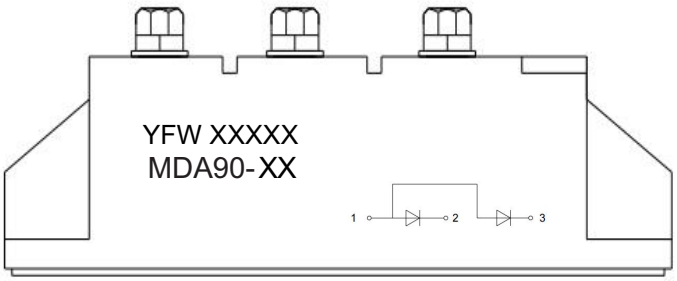



FIG4.Typic al Forward Characteristics Per Bridge Element



## Marking Diagram



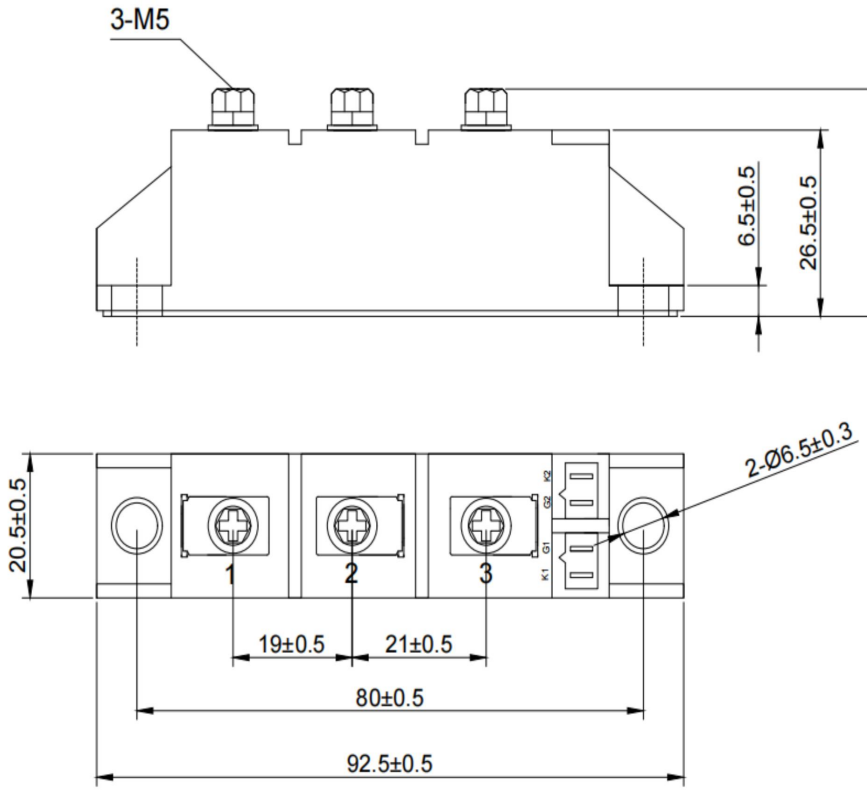

## Ordering information

| Model name | Package | Unit Weight | Base Quantity |
|---|---|---|---|
| MDA90-XX | M39 | - | 10pcs/ Box |

## Package Dimensions

**M39**

**unit: Millimeter**



# Disclaimer

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