

CURRENT 60~100 Ampere
 VOLTAGE RANG 600 to 1800 Volts

MDS60-16 THRU MDS100-16

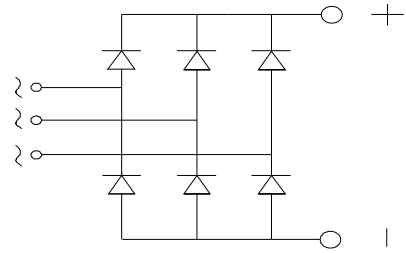
Applications

- Three phase rectifiers for power supplies
- Rectifiers for DC motor field supplies
- Battery charger rectifiers
- Input rectifiers for variable frequency drives

I_o 50-100A
 V_{RRM} 600~1600V
 I_{FSM} 1.2 KA
 i^2t $7.2 A^2S \cdot 10^3$

Features

- Three phase bridge rectifier
- Blocking voltage:800 to 1800V



Module Type

| TYPE | VRRM | VRSM |
|-----------|-------|-------|
| MDS100-08 | 800V | 900V |
| MDS100-12 | 1200V | 1300V |
| MDS100-16 | 1600V | 1700V |
| MDS100-18 | 1800V | 1900V |

Maximum Ratings

| Symbol | Conditions | Values | Units |
|-----------|---|------------|------------|
| I_D | $T_c=100^\circ C$ | 60/75/100 | A |
| I_{FSM} | $T_{vj}=45^\circ C$ t=10ms (50HZ), sine | 920 | A |
| i^2t | $T_{vj}=45^\circ C$ t=10ms (50HZ), sine | 4200 | A^2S |
| Viso | a.c.50HZ;r.m.s.; 1 min | 2500 | V |
| T_{vj} | | -40 to 150 | $^\circ C$ |
| T_{stg} | | -40 to 125 | $^\circ C$ |
| Weight | Module (Approximately) | 220 | g |

Thermal Characteristics

| Symbol | Conditions | Values | Units |
|---------------|------------|--------|--------------|
| $R_{th(j-c)}$ | Per module | 0.32 | $^\circ C/W$ |

Electrical Characteristics

| Symbol | Conditions | Values | Units |
|--------|---------------------------------|------------|-------|
| VFM | $T=25^\circ C$ $I_{FM}=300A$ | 1.90 | V |
| IRD | $T_{vj}=25^\circ C$ $VRD=VRRM$ | ≤ 0.5 | mA |
| | $T_{vj}=150^\circ C$ $VRD=VRRM$ | ≤ 5 | mA |

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Performance Curves

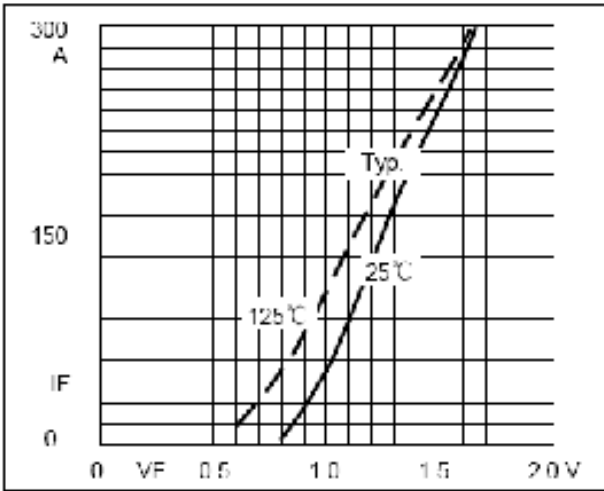


Fig1. Forward Characteristics

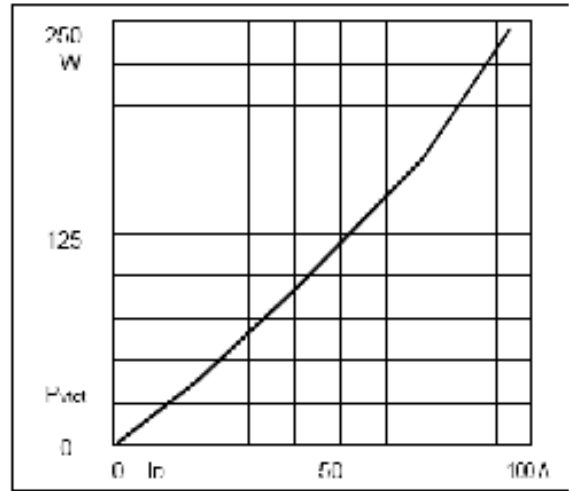


Fig2. Power dissipation

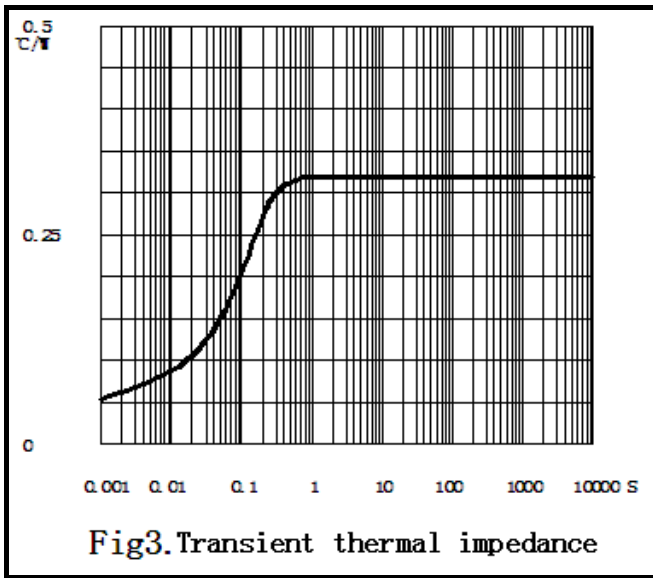


Fig3. Transient thermal impedance

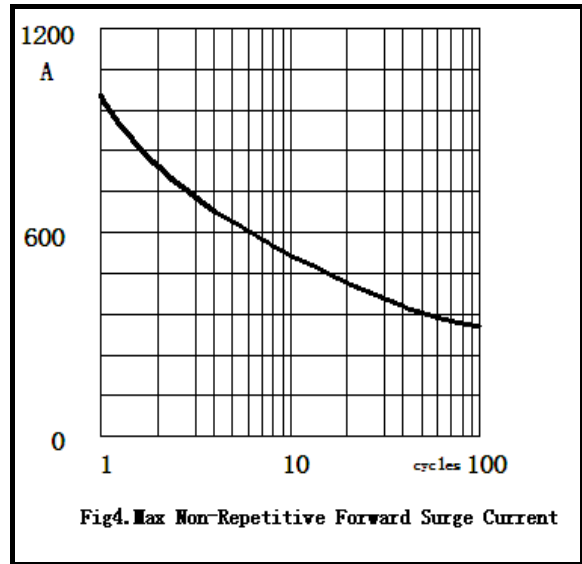


Fig4. Max Non-Repetitive Forward Surge Current

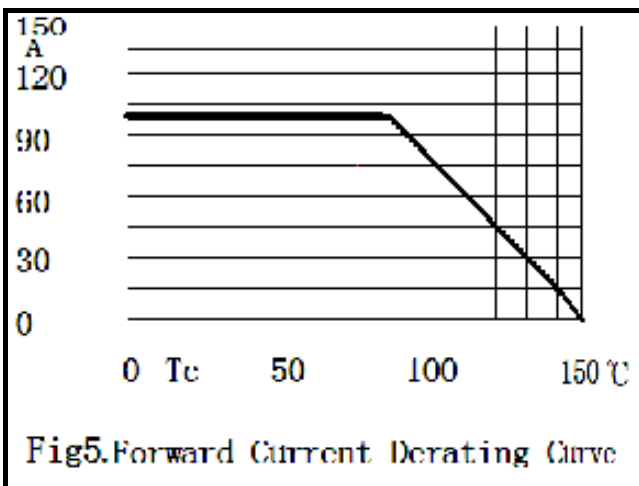


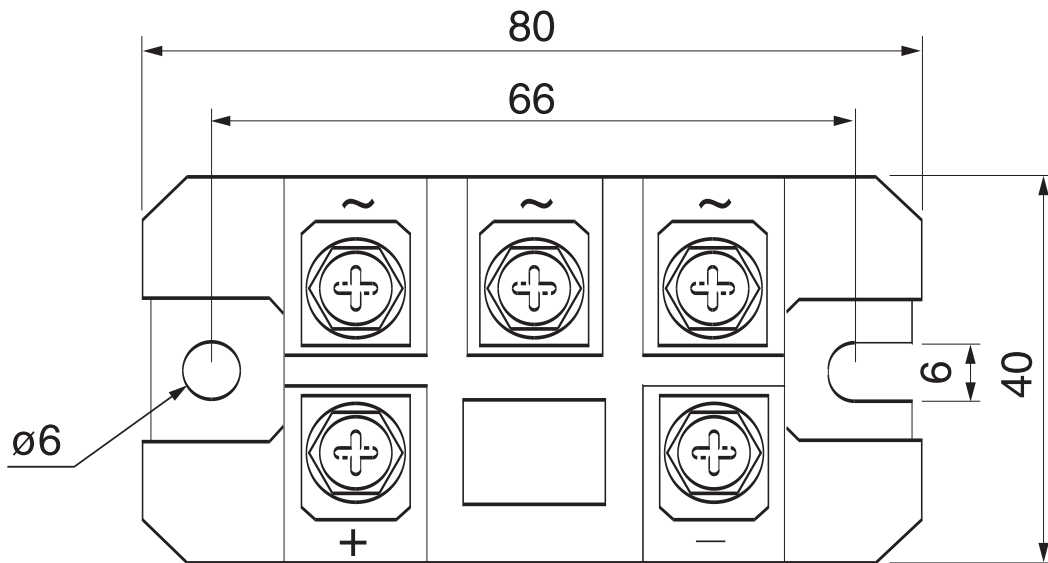
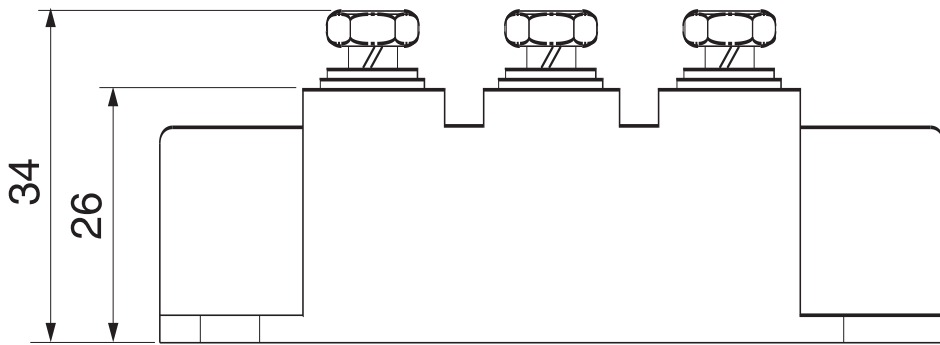
Fig5. Forward Current Derating Curve

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Package Outline Information

CASE: M18

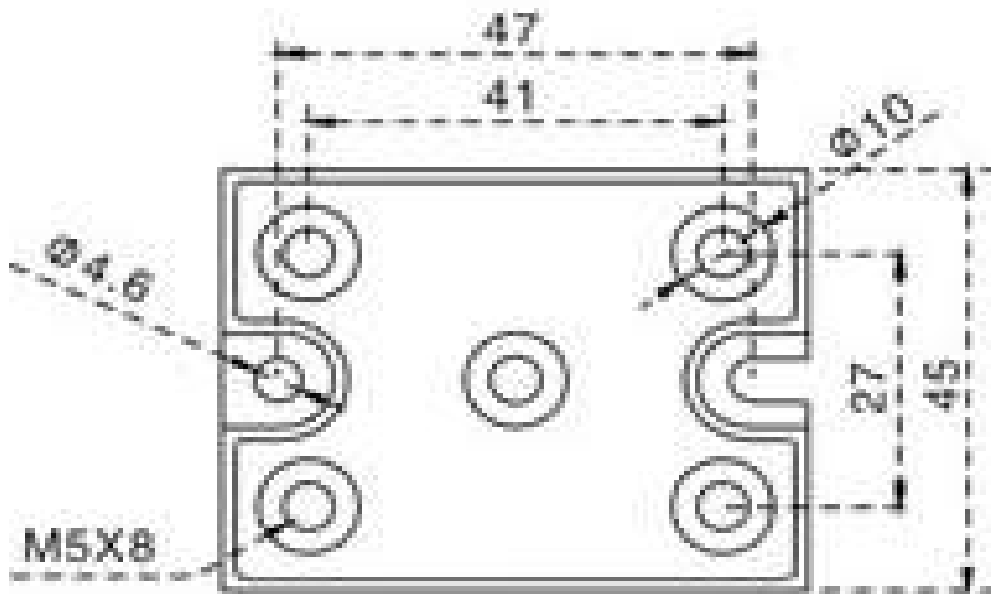
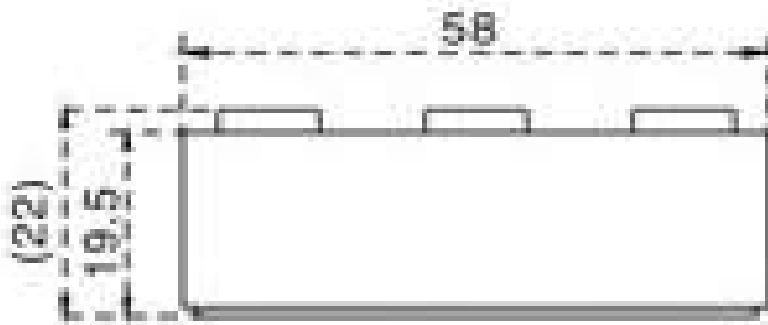


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Package Outline Information

CASE: M48

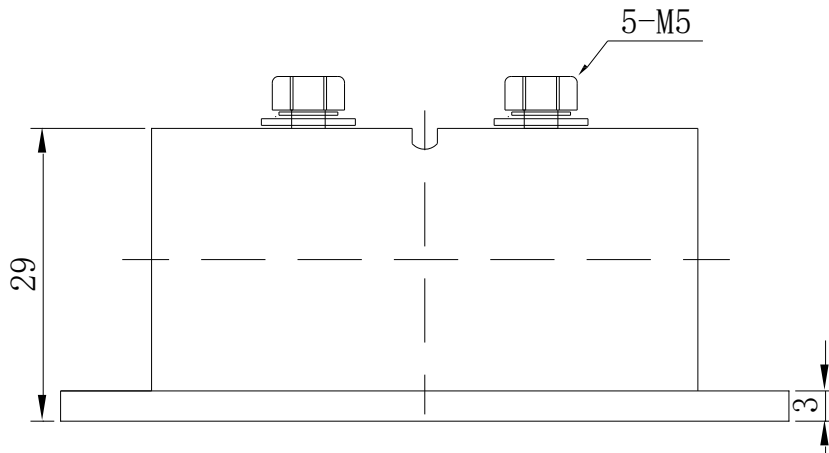
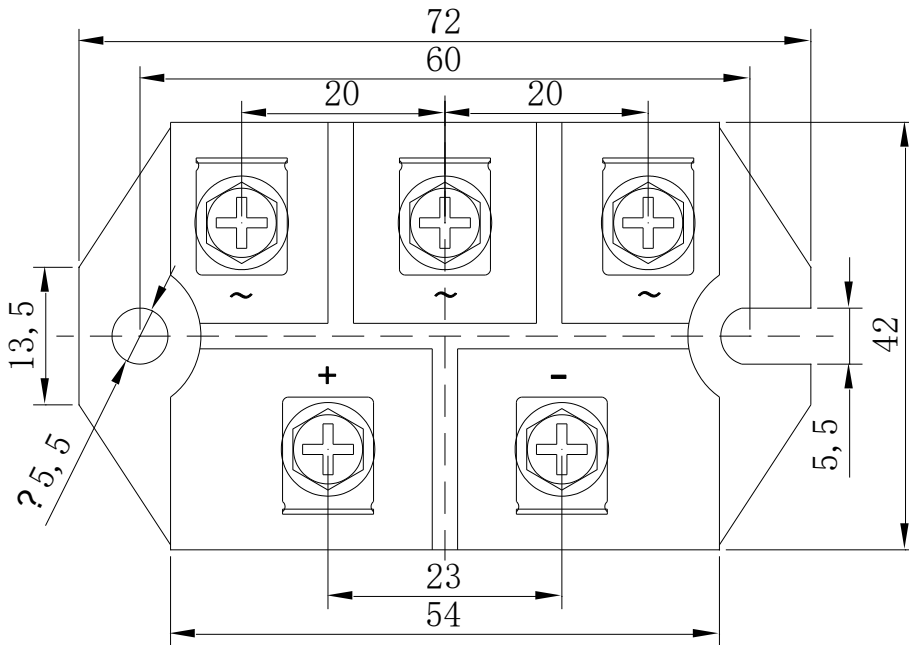


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Package Outline Information

CASE: M16/G



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Package Outline Information

CASE: M15/C

