



Key Parameters

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|-------------|-----------|
| V_{RRM} | = 1800V |
| $I_{F(AV)}$ | = 723A |
| I_{FSM} | = 24000A |
| $V_{F(TO)}$ | = 0.81V |
| r_F | = 0.252mΩ |

Features

- Full blocking capability over wide temperature range
- Heat transfer through aluminium nitride ceramic isolated metal base plate
- Pressure contacts technology for high reliability

Applications

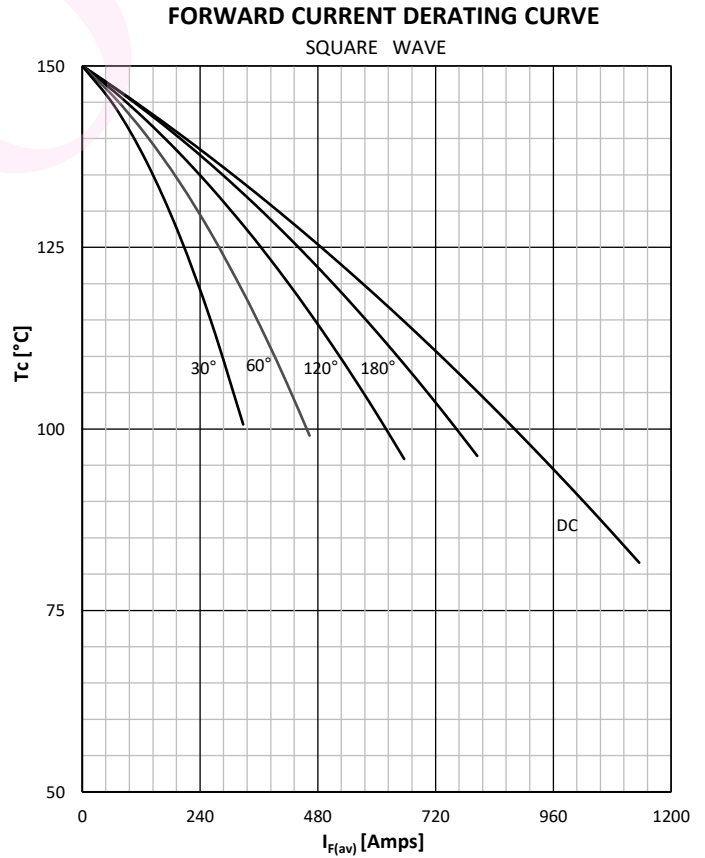
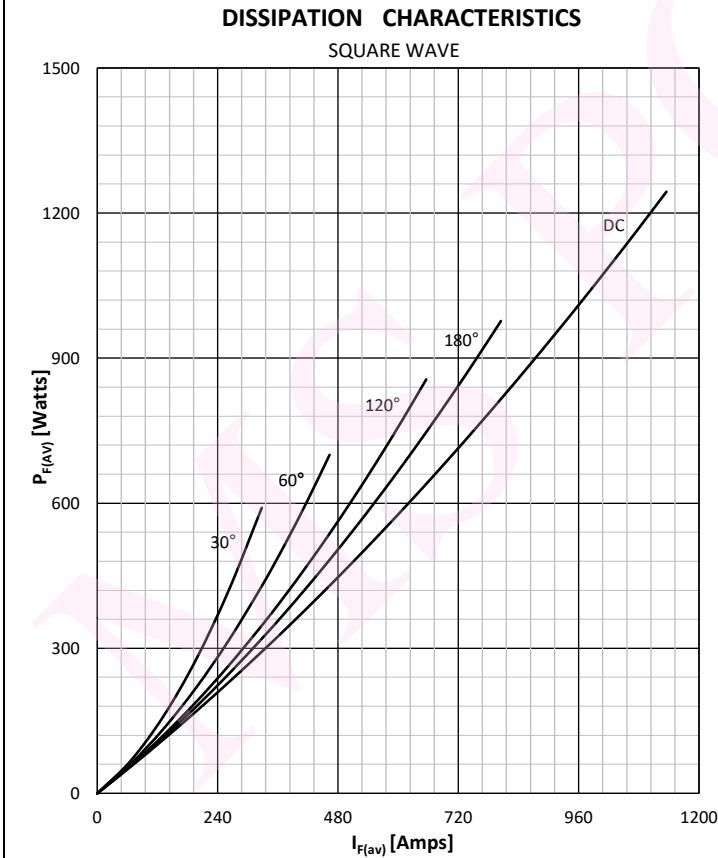
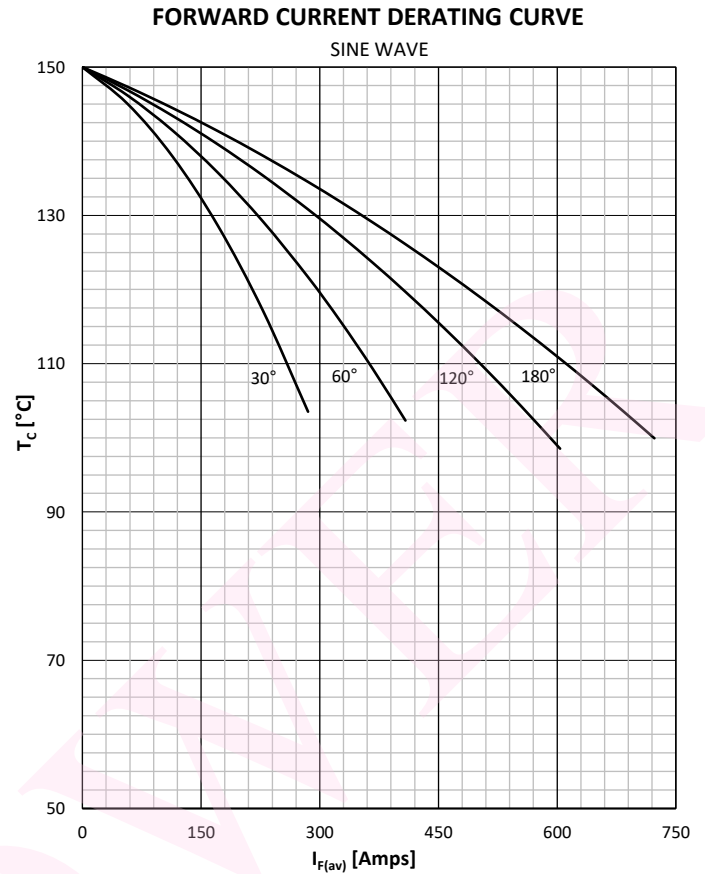
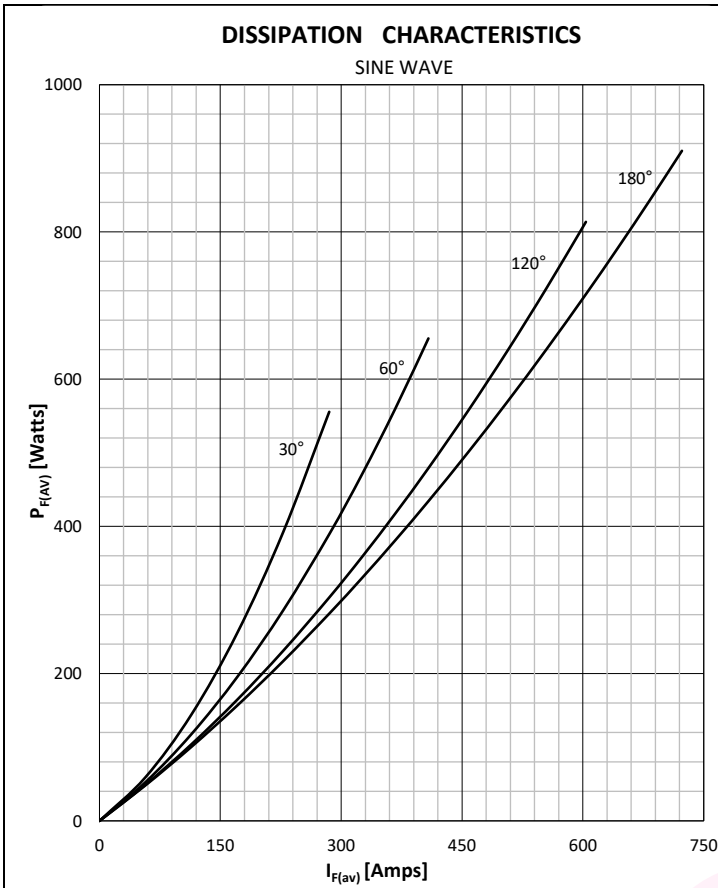
- Power Supplies
- Uncontrolled Rectifiers
- Field supply for DC motors
- Battery Chargers
- UPS

Ordering Information

| MS | DZ | 723 | K | XX |
|---|----------------------------|--------------|---|--|
| Fixed code | DZ- Rectifier Diode Module | Current Code | Technology K = Pressure Contact Technology | Voltage Code Code X 100 = V_{RRM} |
| Order Code MS DZ723K18 : 1800V V_{RRM} , Rectifier Diode Module | | | | |

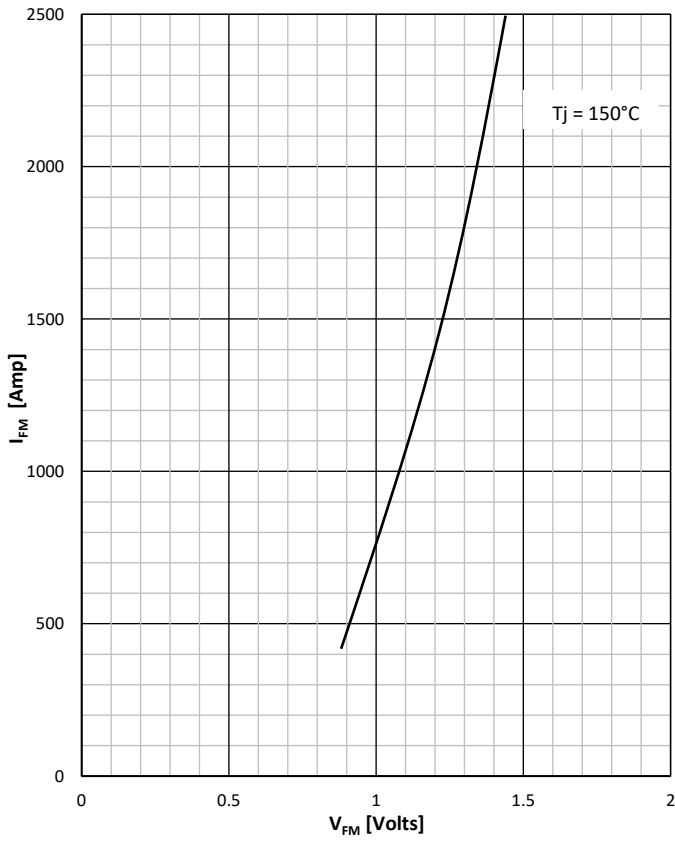
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| Symbol | Characteristic | Conditions | T _j [°C] | Value | Unit |
|----------------------|-------------------------------------|---|------------------------|-------------------------------|------------------|
| BLOCKING | | | | | |
| V _{RRM} | Repetitive peak reverse voltage | | 150 | 200 - 1800 | V |
| V _{RSM} | Non-repetitive peak reverse voltage | | 150 | 300 - 1900 | V |
| I _{RRM} | Repetitive peak reverse current | V = V _{RRM} | 150 | 50 | mA |
| CONDUCTING | | | | | |
| I _{F(AV)} | Mean forward current | 180° sin ,50 Hz, T _c =100°C | | 723 | A |
| I _{FRMS} | RMS current | | | 1135 | A |
| I _{FSM} | Surge forward current | Sine wave, 10 ms Without reverse voltage | 25 | 24000 | A |
| | | | 150 | 21000 | A |
| I ² t | I ² t | Sine wave, 10 ms Without reverse voltage | 25 | 2880 x 10 ³ | A ² s |
| | | | 150 | 2205 x 10 ³ | A ² s |
| V _F | Forward voltage | On-state current = 2200A | 25 | 1.40 | V |
| V _{F(TO)} | Threshold voltage | | 150 | 0.81 | V |
| r _F | Forward slope resistance | | 150 | 0.252 | mΩ |
| MOUNTING | | | | | |
| R _{th(j-c)} | Thermal impedance, sin 180° | Junction to case, per module | | 0.055 | °C/W |
| R _{th(c-h)} | Thermal impedance | Case to heatsink, per module | | 0.01 | °C/W |
| T _j | Max. junction temperature | | | 150 | °C |
| T _{stg} | Storage temperature | | | -40 150 | °C |
| V _{ISOL} | Insulation test voltage, RMS | F=50Hz, 1min | | 3.0 | KV |
| M1 | Mounting torque | | | 5 ± 15% | Nm |
| M2 | Terminal connection torque | | | 12 ± 10% | Nm |
| W | Weight (Approx.) | | | 900 | gm |
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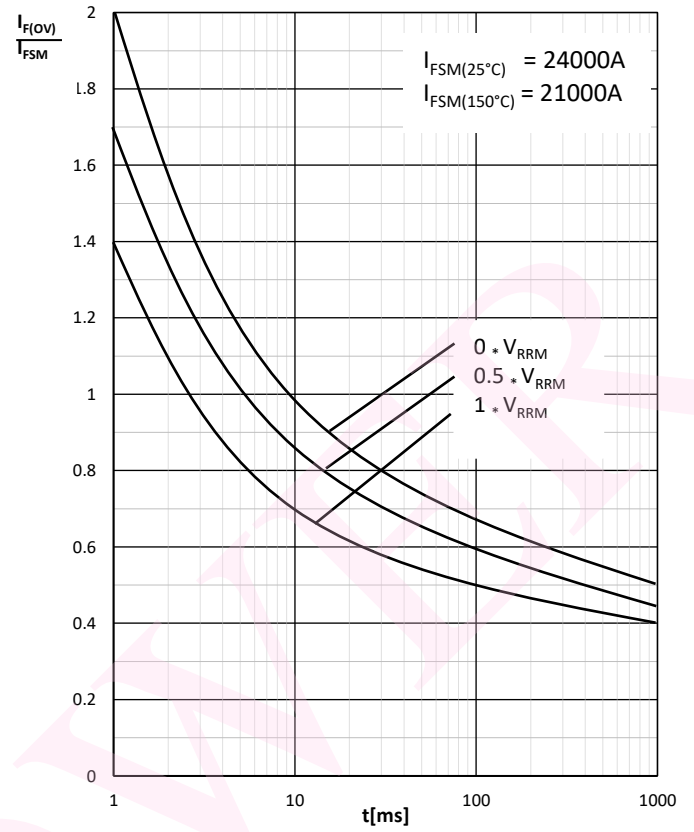


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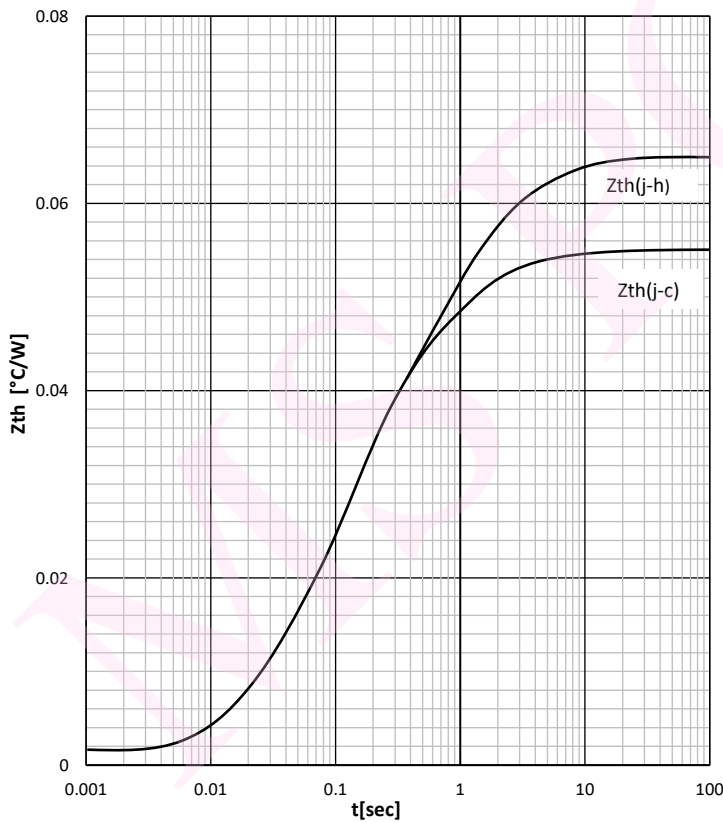
FORWARD CHARACTERISTIC



SURGE CHARACTERISTICS



TRANSIENT THERMAL IMPEDANCE



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