

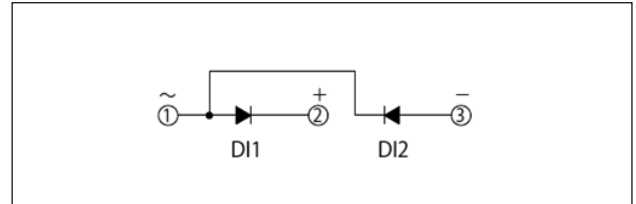
DCA240DB

UL:E76102



Same package as the product in this photo.

$V_{RRM} = 800V, 1600V$
 $I_F(AV) = 240A$

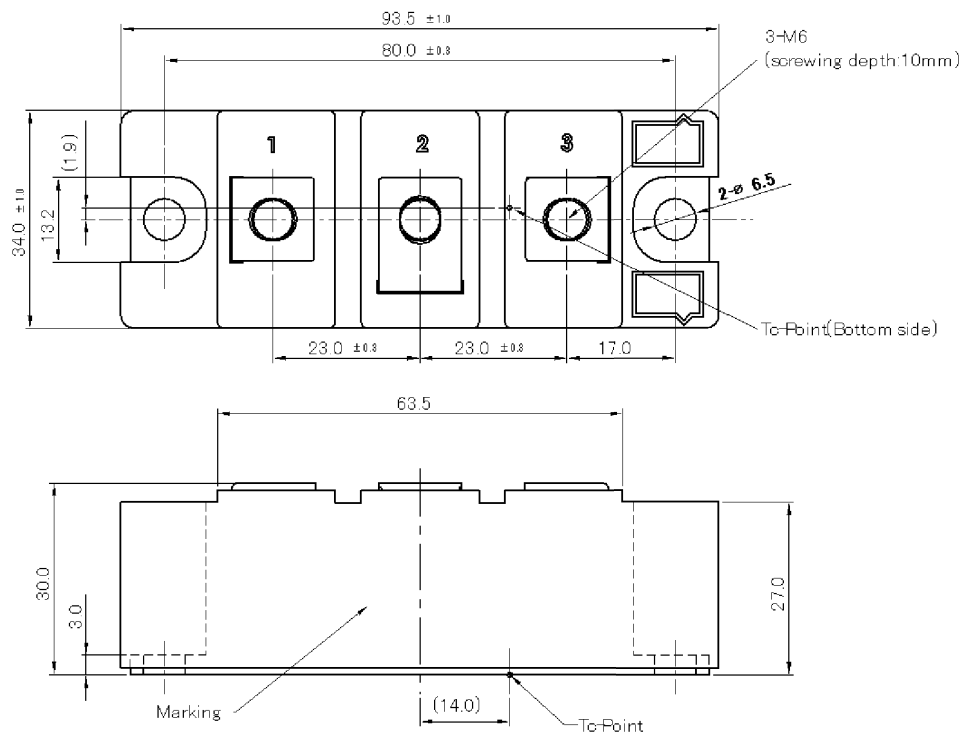


Features and Advantages

- Improved heat dissipation thanks to newly designed low layered internal structure. Possibility to reduce the heatsink.
- Reduces thermal stress on the diode chip thanks to high heat dissipation internal structure, thus improving the long term reliability.
- 20% weight reduction by optimizing the internal design and material.
- Using 100% lead-free solder to protect the environment.

Applications

Motor Drives, Battery Charger, Generator, Elevator, Various Power Supplies



Unit:mm

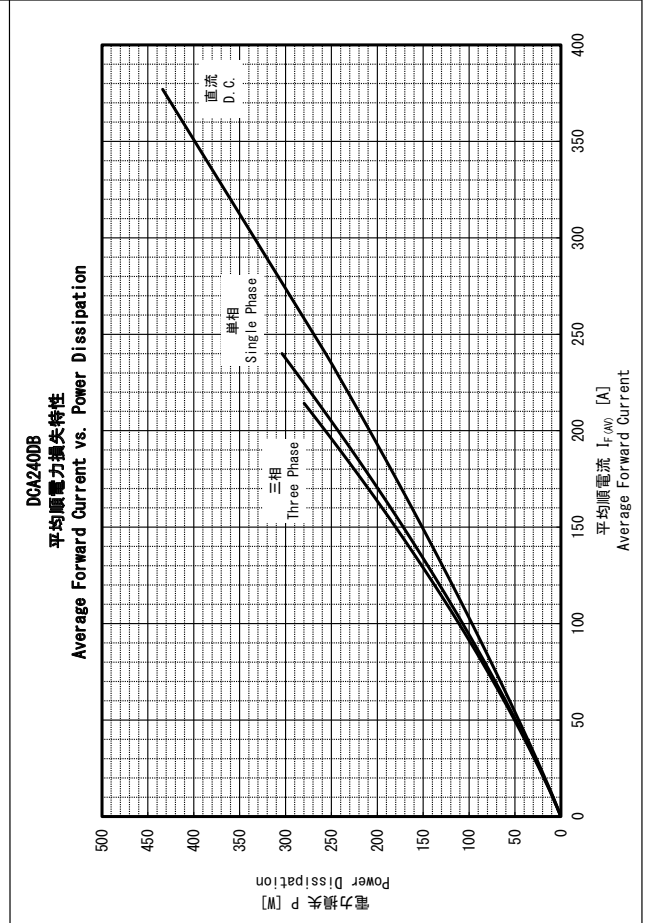
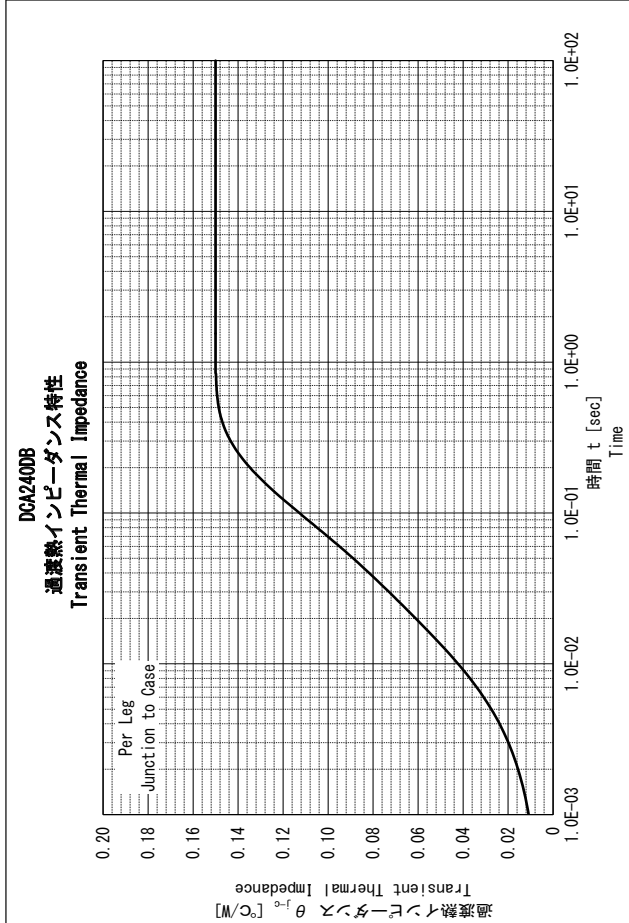
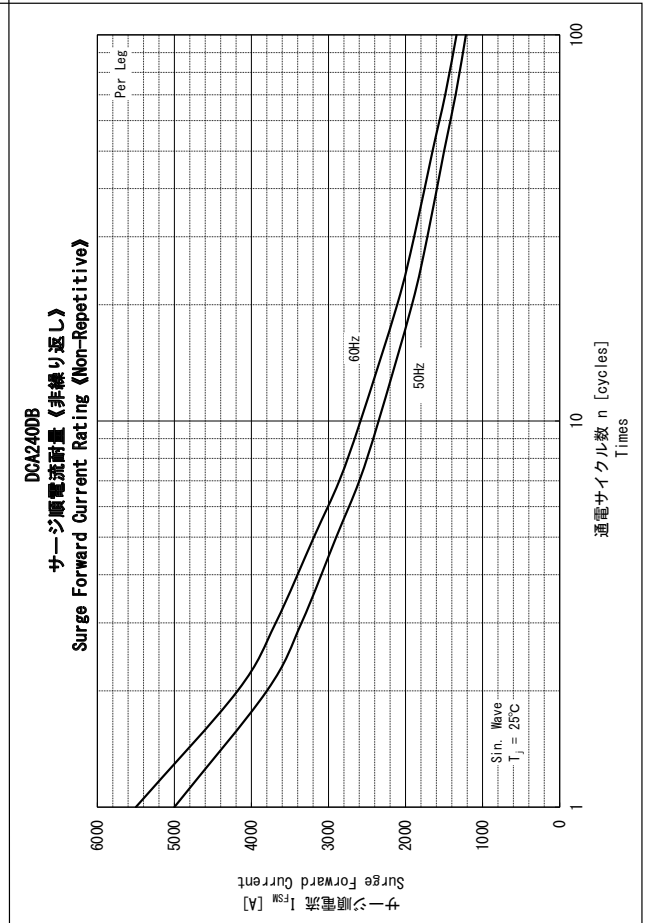
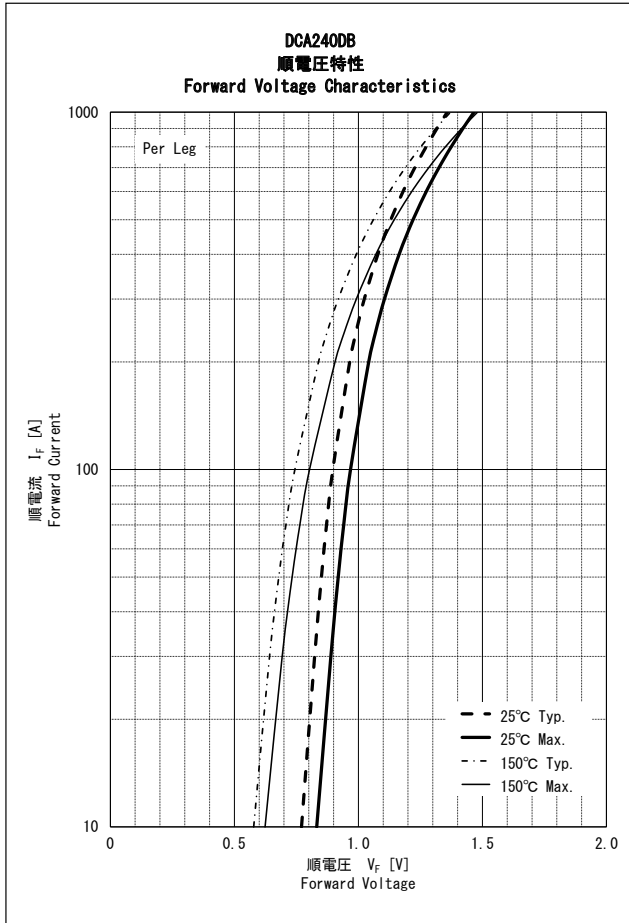
■ Maximum Ratings (T_j=25°C unless otherwise specified)

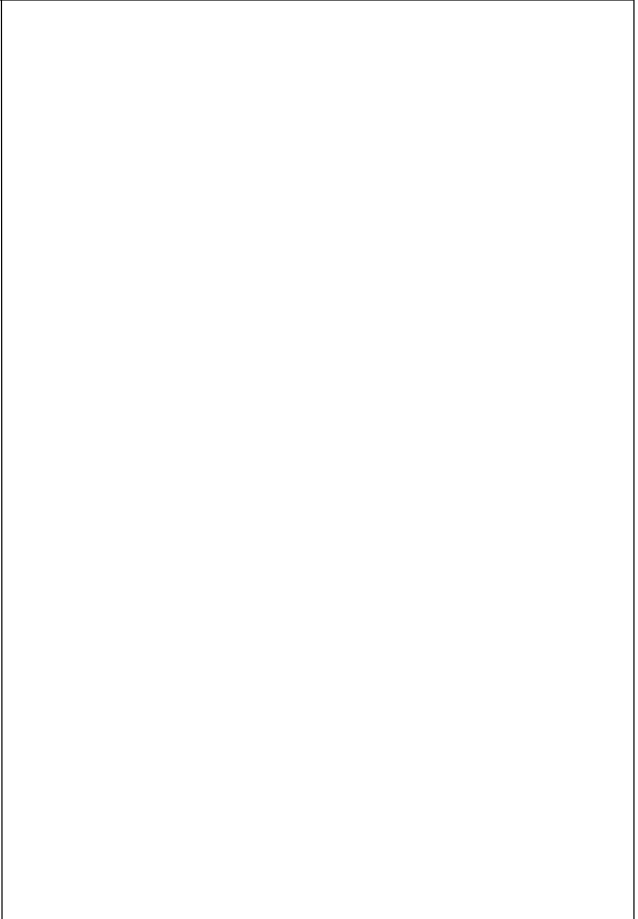
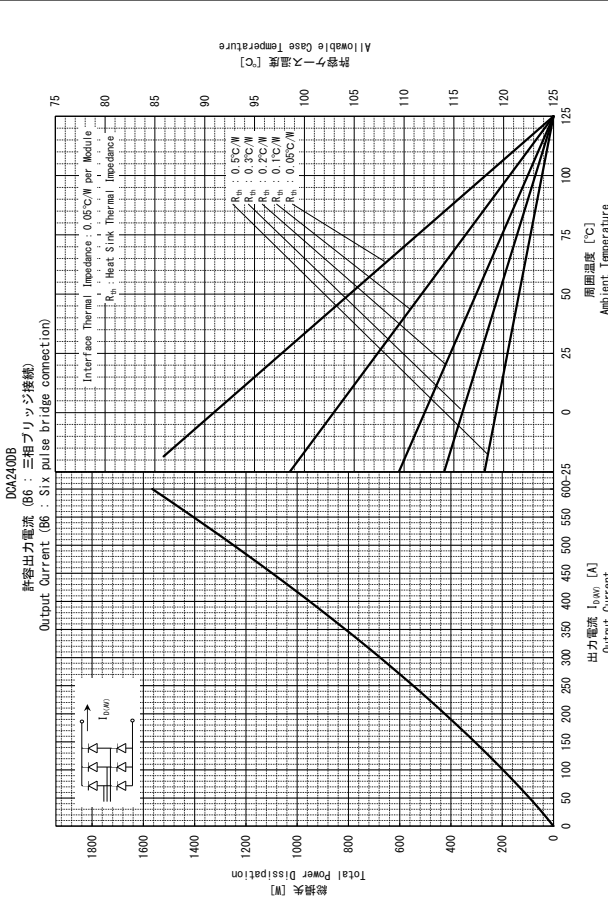
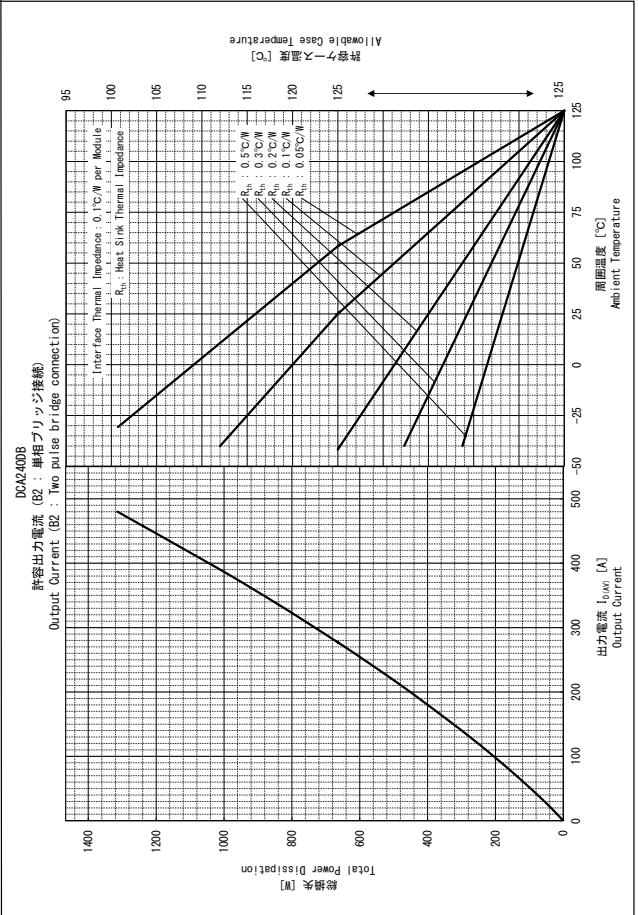
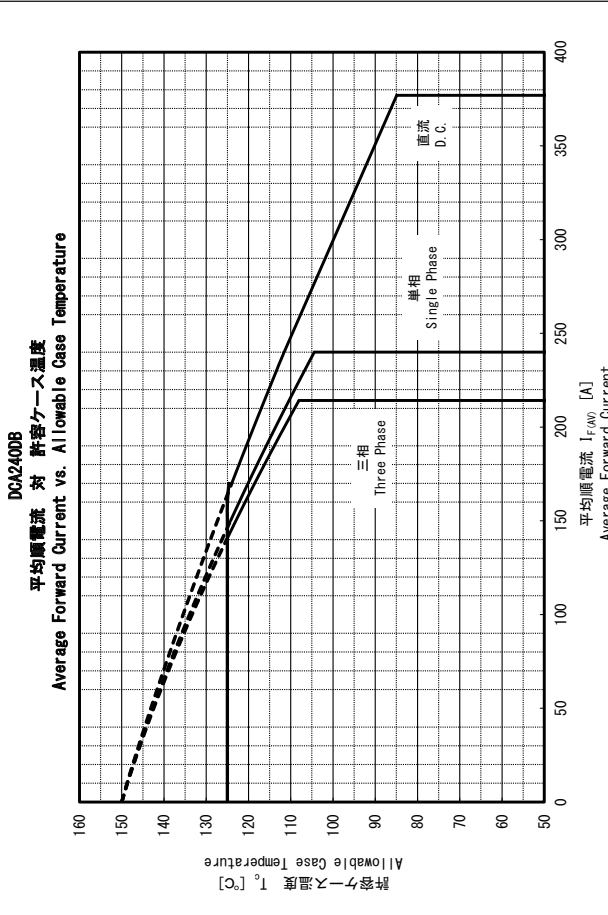
| Item | Symbol | Unit | DCA240DB80 | DCA240DB160 |
|-------------------------------------|------------------|------|------------|-------------|
| Repetitive Peak Reverse Voltage | V _{RRM} | V | 800 | 1600 |
| Non-Repetitive Peak Reverse Voltage | V _{RSM} | V | 960 | 1700 |

| Item | Symbol | Unit | Ratings | Conditions |
|--------------------------------|---------------------|------------------|-----------|--|
| Average Forward Current | I _{F(AV)} | A | 240 | Sin.180° ,T _c =104°C |
| R.M.S. Forward Current | I _{F(RMS)} | A | 377 | Sin.180° ,T _c =104°C |
| Surge Forward Current | I _{FSM} | A | 5000/5500 | 50/60Hz Sin.Wave,Peak Value,Non-Repetitive |
| I ² t (for fusing) | I ² t | A ² s | 125000 | 50/60Hz Sin.Wave |
| Isolation Voltage | V _{ISO} | V | 2500 | AC,RMS,1min |
| Operating Junction Temperature | T _j | °C | -40~+150 | |
| Storage Temperature | T _{stg} | °C | -40~+125 | |
| Mounting Torque(M6) | - | N·m | 4.7 | Recommended Value 2.5~3.9 (25~40) |
| Terminal Torque(M6) | - | (kgf·cm) | 4.7 | Recommended Value 2.5~3.9 (25~40) |
| Weight | - | g | 180 | Typical Value |

■ Electrical Characteristics (T_j=25°C unless otherwise specified)

| Item | Symbol | Unit | Ratings | | | Conditions |
|--------------------------|----------------------|------|---------|-------|-------|---|
| | | | Min. | Typ. | Max. | |
| Reverse Current | I _R | mA | | 5 | 50 | T _j =T _{jmax} ,V _R =V _{RRM} ,Per Leg |
| Forward Voltage | V _F | V | | 1.25 | 1.35 | I _F =750A,Per Leg |
| Threshold Voltage | V _(TO) | V | | 0.93 | | T _j =25°C |
| | | | | 0.76 | | T _j =T _{jmax} |
| Forward Slope Resistance | r _T | mΩ | | 0.55 | | T _j =25°C |
| | | | | 0.74 | | T _j =T _{jmax} |
| Thermal Resistance | R _{th(j-c)} | °C/W | | 0.13 | 0.15 | Junction to Case (Per Leg) |
| | | | | 0.065 | 0.075 | Junction to Case (Per Module) |
| | R _{th(c-f)} | °C/W | | | 0.10 | Case to Fin (Per Module) Thermal conductivity (Si grease) =9×10 ⁻³ [W/cm·°C] |





<Attention>

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- We will not be held responsible for any accidents or damages that have occurred due to use exceeding the rated values or non-observance of precautions.
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- Do not use the product for purposes of development, etc. of weapons of mass destruction or for purposes of military utilization, etc.
- Consult us if you have any questions about the product.

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