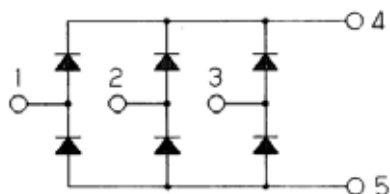


DIODE

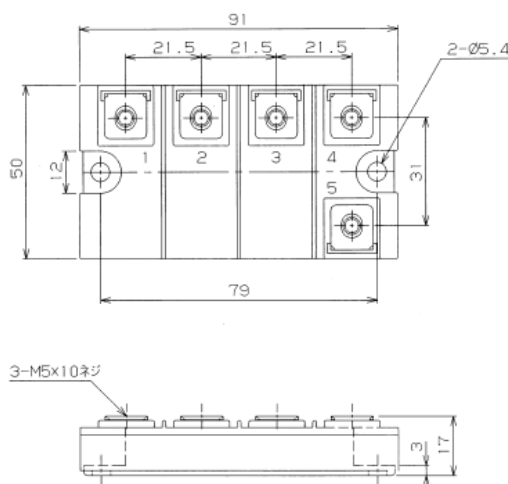
200A Avg 800 Volts

PT200KN8

■回路図 CIRCUIT



■外形寸法図 OUTLINE DRAWING



Dimension: [ mm ]

■最大定格 Maximum Ratings

| 項目<br>Parameter                                    | 記号<br>Symbol    | 耐圧クラス Grade |  | 単位<br>Unit |
|----------------------------------------------------|-----------------|-------------|--|------------|
|                                                    |                 | PT200KN8    |  |            |
| くり返しピーク逆電圧<br>Repetitive Peak Reverse Voltage      | *1<br>$V_{RRM}$ | 800         |  | V          |
| 非くり返しピーク逆電圧<br>Non Repetitive Peak Reverse Voltage | *1<br>$V_{RSM}$ | 900         |  | V          |

| 項 目<br>Parameter                                    |                  | 記 号<br>Symbol | 条 件<br>Conditions                                                                             |    | 定格値<br>Max.Rated Value | 単位<br>Unit       |
|-----------------------------------------------------|------------------|---------------|-----------------------------------------------------------------------------------------------|----|------------------------|------------------|
| 平均出力電流<br>Average Rectified<br>Output Current       |                  | $I_{O(AV)}$   | 三相全波整流 $T_c=T_t=101$<br>3-Phase Full Wave Rectified<br>( $T_c$ : 測定点チップ直下 / $T_t$ : Terminal) |    | 200                    | A                |
| サージ順電流 *1<br>Surge Forward Current                  |                  | $I_{FSM}$     | 50Hz 正弦半波, 1 サイクル, 非くり返し<br>Half Sine Wave, 1Pulse, Non-Repetitive                            |    | 2000                   | A                |
| 電流二乗時間積 *1<br>I Squared t                           |                  | $I^2t$        | 2 ~ 10ms                                                                                      |    | 20000                  | A <sup>2</sup> s |
| 動作接合温度範囲<br>Operating Junction<br>Temperature Range |                  | $T_{jw}$      |                                                                                               |    | -40 ~ +150             |                  |
| 保存温度範囲<br>Storage Temperature Range                 |                  | $T_{stg}$     |                                                                                               |    | -40 ~ +125             |                  |
| 絶縁耐圧<br>Isolation Voltage                           |                  | $V_{iso}$     | 端子 - ベース間, AC 1 分間<br>Terminal to Base, AC 1min.                                              |    | 2500                   | V                |
| 締付トルク<br>Mounting<br>Torque                         | ベース部<br>Mounting | F             | サーマルパッド 塗布<br>Greased                                                                         | M5 | 2.4 ~ 2.8              | N・m              |
|                                                     | 主端子部<br>Terminal |               |                                                                                               | M5 | 2.4 ~ 2.8              | N・m              |

■電気的特性 Electrical Characteristics

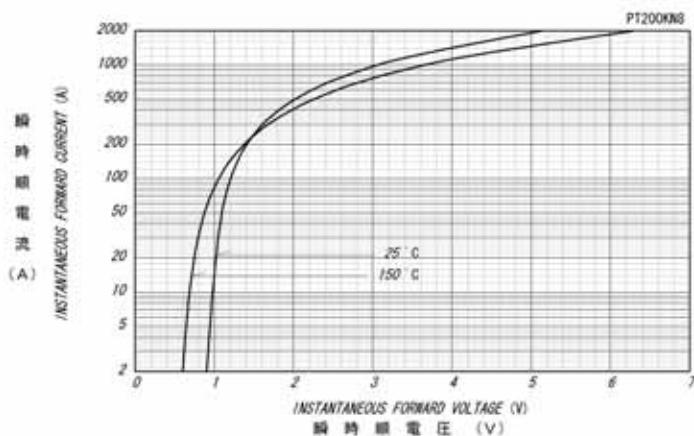
| 項目<br>Parameter                | 記号<br>Symbol   | 条件<br>Conditions                                            | 特性値 (最大)<br>Maximum Value | 単位<br>Unit |
|--------------------------------|----------------|-------------------------------------------------------------|---------------------------|------------|
| ピーク逆電流<br>Peak Reverse Current | *1<br>$I_{RM}$ | $T_j=150$ , $V_{RM}=V_{RRM}$                                | 7                         | mA         |
| ピーク順電圧<br>Peak Forward Voltage | *1<br>$V_{FM}$ | $T_j=25$ , $I_{FM}=200A$                                    | 1.40                      | V          |
| 熱抵抗<br>Thermal Resistance      | $R_{th(j-c)}$  | 接合部 - ケース間 (トール: $T_c$ 測定点チップ直下)<br>Junction to Case, Total | 0.06                      | /W         |
| 接合熱抵抗<br>Thermal Resistance    | $R_{th(c-f)}$  | ケース - フィン間 (トール), サーマルパッド 塗布<br>Case to Fin, Total, Greased | 0.06                      | /W         |

質量 - - - 約 210g  
Approximate Weight

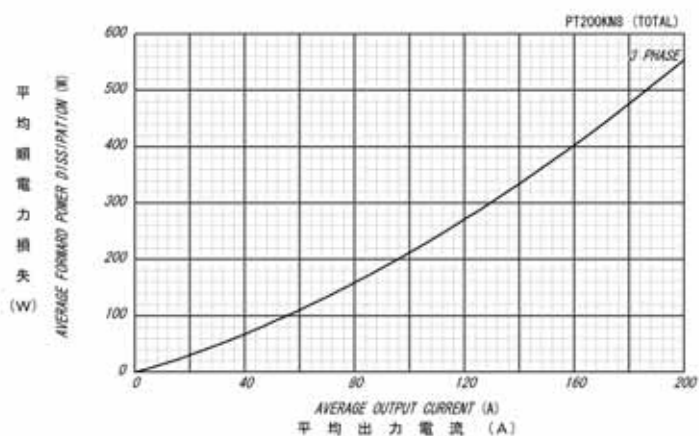
\*1 : 1 アーム当りの値 Value Per 1 Arm.

■ 定格・特性曲線

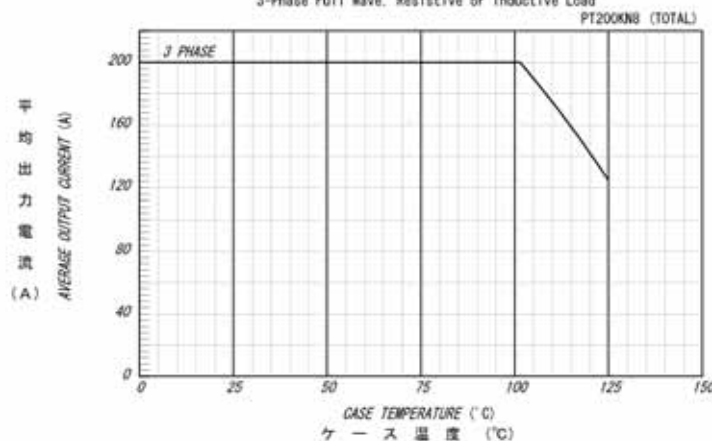
順電圧特性  
FORWARD CURRENT VS. VOLTAGE



平均順電力損失特性  
AVERAGE FORWARD POWER DISSIPATION



平均出力電流－ケース温度定格  
AVERAGE OUTPUT CURRENT VS. CASE TEMPERATURE  
3-Phase Full Wave, Resistive or Inductive Load



サージ順電流定格  
SURGE CURRENT RATINGS

f=50Hz, Half Sine Wave, Non-Repetitive, Tj=150°C

