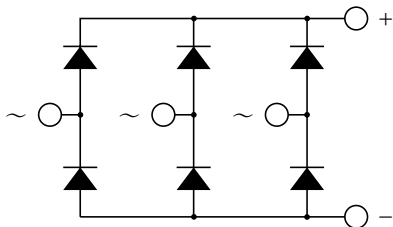


**DIODE**

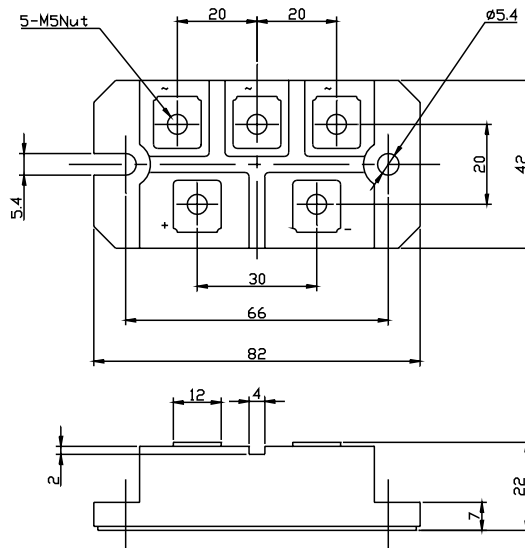
**50A Avg 800 Volts**

**PT50S8**

■回路図 CIRCUIT



■外形寸法図 OUTLINE DRAWING (単位 Dimension : mm)



■最大定格 Maximum Ratings

| 項目<br>Parameter                                       | 記号<br>Symbol | 耐压クラス Grade |  | 単位<br>Unit |
|---|--------------|-------------|--|------------|
|   |              | PT50S8      |  |            |
| くり返しピーク逆電圧 *1<br>Repetitive Peak Reverse Voltage      | $V_{RRM}$    | 800         |  | V          |
| 非くり返しピーク逆電圧 *1<br>Non Repetitive Peak Reverse Voltage | $V_{RSM}$    | 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 Output Current       | $I_0(AV)$        | 三相全波整流 $T_c = T_t = 111^\circ\text{C}$<br>3-Phase Full Wave, Rectified (Terminal) | 50                      | 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                  | 450                     | A                |            |
| 電流二乗時間積 *1<br>I Squared t                        | $I^2t$           | 2 ~ 10ms  | 1000                    | $A^2s$           |            |
| 動作接合温度範囲<br>Operating Junction Temperature Range | $T_{jw}$         |   | -40 ~ +150              | $^\circ\text{C}$ |            |
| 保存温度範囲<br>Storage Temperature Range              | $T_{stg}$        |   | -40 ~ +125              | $^\circ\text{C}$ |            |
| 絶縁耐圧<br>Isolation Voltage                        | $V_{iso}$        | 端子-裏面ベース間, AC 1分間<br>Terminal to Base, AC 1 min.                                  | 2000                    | V                |            |
| 締付トルク<br>Mounting Torque                         | ベース部<br>Mounting | 推奨値<br>Recommended value  | M5                      | 2.4~2.8          | $N\cdot m$ |
|  | 主端子部<br>Terminal |   | M5                      | 2.4~2.8          | $N\cdot m$ |

■電気的特性 Electrical Characteristics

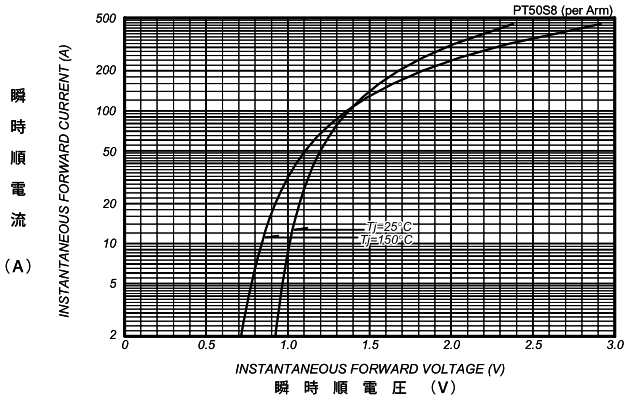
| 項目<br>Parameter                   | 記号<br>Symbol  | 条件<br>Conditions  | 特性値 (最大)<br>Maximum Value | 単位<br>Unit         |
|-----------------------------------|---------------|---|---------------------------|--------------------|
| ピーク逆電流 *1<br>Peak Reverse Current | $I_{RM}$      | $T_j = 150^\circ\text{C}$ , $V_{RM} = V_{RRM}$              | 10                        | mA                 |
| ピーク順電圧 *1<br>Peak Forward Voltage | $V_{FM}$      | $T_j = 25^\circ\text{C}$ , $I_{FM} = 50A$                   | 1.2                       | V                  |
| 熱抵抗<br>Thermal Resistance         | $R_{th(j-c)}$ | 接合部-ケース間 (トータル)<br>Junction to Case, Total                  | 0.35                      | $^\circ\text{C}/W$ |
| 接触熱抵抗<br>Thermal Resistance       | $R_{th(c-f)}$ | ケース-フィン間(トータル), サーマルコンパウンド塗布<br>Case to Fin, Total, Greased | 0.06                      | $^\circ\text{C}/W$ |

質量...約180g  
Approximate Weight

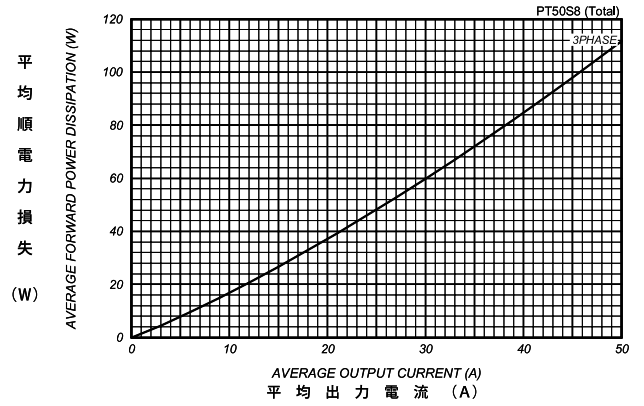
\*1 : 1アーム当りの値 Value Per 1 Arm.

■ 定格・特性曲線

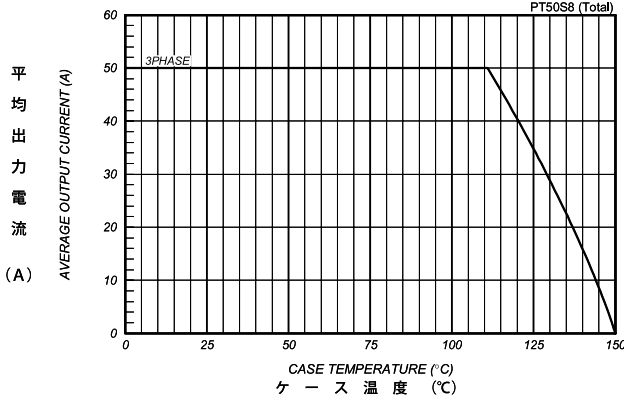
順電圧特性  
FORWARD CURRENT VS. VOLTAGE



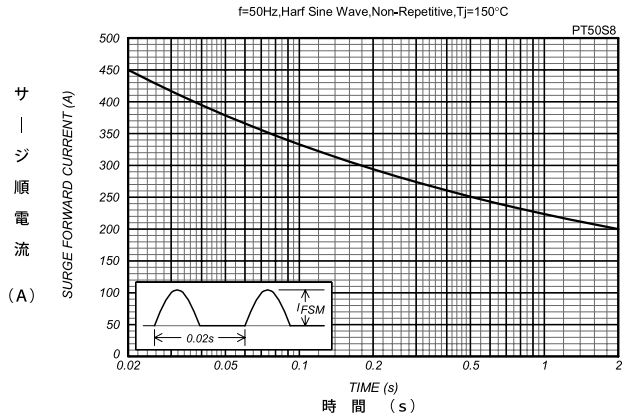
平均順電力損失特性  
AVERAGE FORWARD POWER DISSIPATION



平均出力電流 - ケース温度定格  
AVERAGE OUTPUT CURRENT VS. CASE TEMPERATURE



サージ順電流定格  
SURGE CURRENT RATINGS



ダイオードモジュール