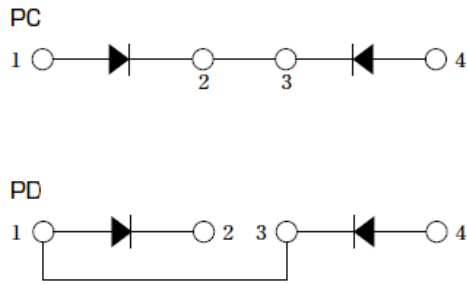


DIODE

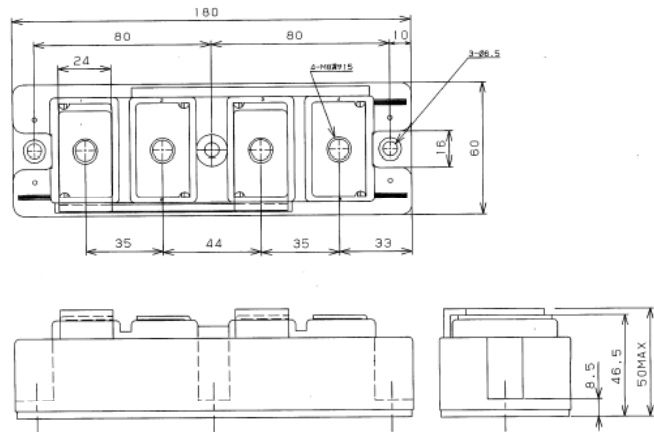
400A Avg 1600 Volts

PC400N16  
PD400N16

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        | 耐压クラス Grade         |  | 単位<br>Unit |
|--|---------------------|---------------------|--|------------|
|  |                     | PC400N16 / PD400N16 |  |            |
| くり返しピーク逆電圧<br>Repetitive Peak Reverse Voltage      | *1 V <sub>RRM</sub> | 1600                |  | V          |
| 非くり返しピーク逆電圧<br>Non Repetitive Peak Reverse Voltage | *1 V <sub>FSM</sub> | 1700                |  | V          |

| 項目<br>Parameter                                  | 記号<br>Symbol           | 条件<br>Conditions  | 定格値<br>Max. Rated Value | 単位<br>Unit       |            |     |
|--|------------------------|---|-------------------------|------------------|------------|-----|
| 平均整流電流<br>Average Rectified Output Current       | *1 I <sub>O(AV)</sub>  | 商用周波数 180° 通電<br>Half Sine Wave T <sub>c</sub> =82                  | 400                     | A                |            |     |
| 実効加順電流<br>RMS Forward Current                    | *1 I <sub>F(RMS)</sub> |   | 630                     | A                |            |     |
| サージ加順電流<br>Surge Forward Current                 | *1 I <sub>FSM</sub>    | 50Hz 正弦半波, 1 サイクル, 非くり返し<br>Half Sine Wave, 1 Pulse, Non-Repetitive | 7200                    | A                |            |     |
| 電流二乗時間積<br>I Squared t                           | *1 I <sup>2</sup> t    | 2 ~ 10ms  | 259000                  | A <sup>2</sup> s |            |     |
| 動作接合温度範囲<br>Operating Junction Temperature Range | T <sub>jw</sub>        |   | -40 ~ +125              |                  |            |     |
| 保存温度範囲<br>Storage Temperature Range              | T <sub>stg</sub>       |   | -40 ~ +125              |                  |            |     |
| 絶縁耐圧<br>Isolation Voltage                        | V <sub>iso</sub>       | 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 Torque                         | ベース部<br>Mounting       | F   | サマルコパッド 塗布<br>Greased   | M6               | 2.5 ~ 3.5  | N・m |
|  | 主端子部<br>Terminal       |   |                         | M8               | 9.0 ~ 10.0 | N・m |

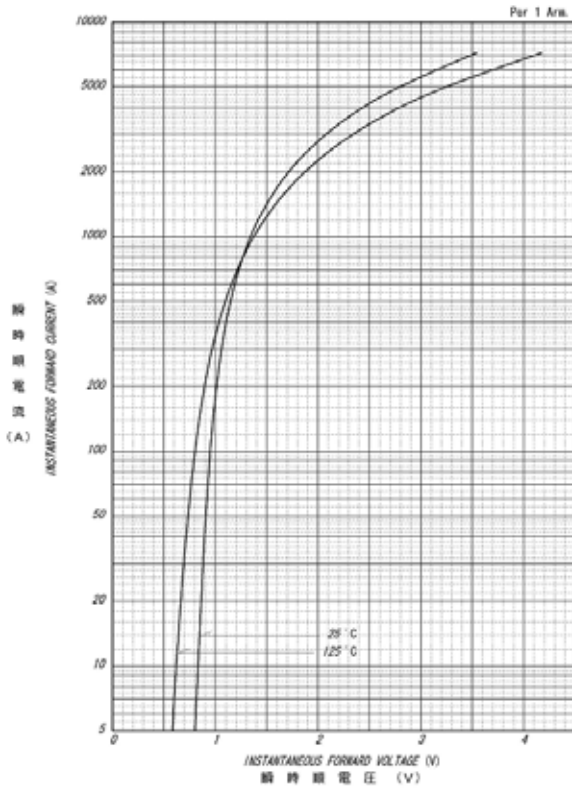
電気的特性 Electrical Characteristics

| 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 I <sub>RM</sub>      | T <sub>j</sub> =125 , V <sub>RM</sub> =V <sub>RRM</sub> | 50                        | mA         |
| ピーク加順電圧<br>Peak Forward Voltage | *1 V <sub>FM</sub>      | T <sub>j</sub> = 25 , I <sub>FM</sub> =1300A            | 1.45                      | V          |
| 熱抵抗<br>Thermal Resistance       | *1 R <sub>th(j-c)</sub> | 接合部 - ケース間<br>Junction to Case                          | 0.07                      | /W         |
| 接合熱抵抗<br>Thermal Resistance     | *1 R <sub>th(c-f)</sub> | ケースフィン間, サマルコパッド 塗布<br>Case to Fin, Greased             | 0.05                      | /W         |

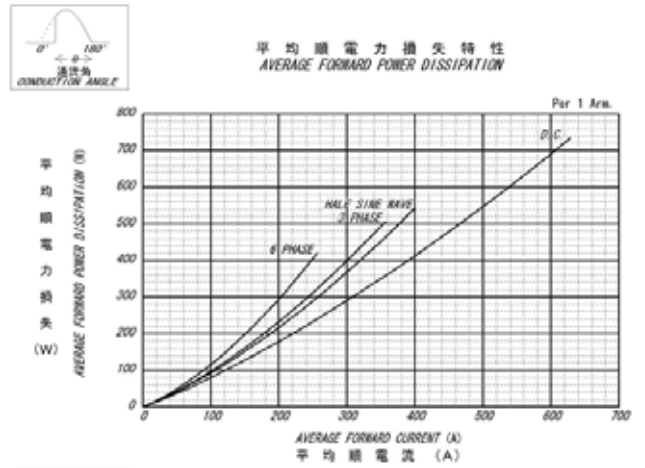
質量 Approximate Weight - - - 約 960g

\*1: 1アーム当りの値 Value Per 1 Arm.

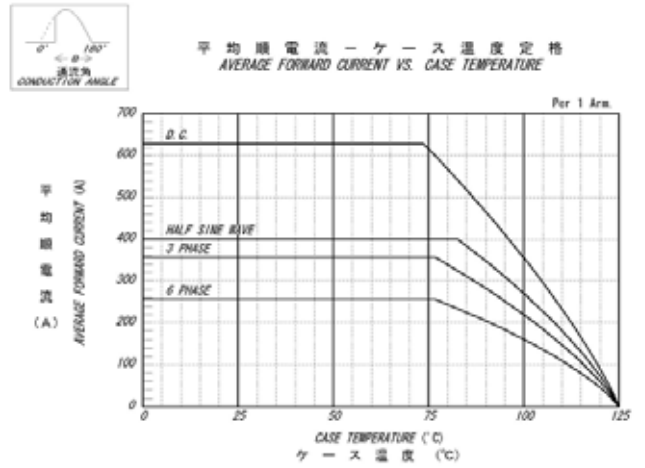
順電圧特性  
FORWARD CURRENT VS. VOLTAGE



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

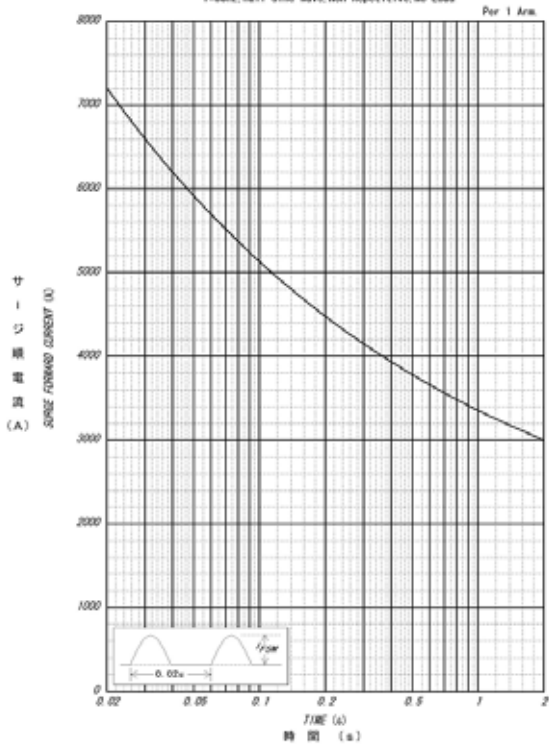


平均順電流 - ケース温度定格  
AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE



サージ順電流定格  
SURGE CURRENT RATINGS

f=50Hz, Half Sine Wave, Non-Repetitive, No Load



瞬時熱抵抗特性  
MAXIMUM TRANSIENT THERMAL IMPEDANCE  
Junction to Case

