

30A Avg.

400 Volts

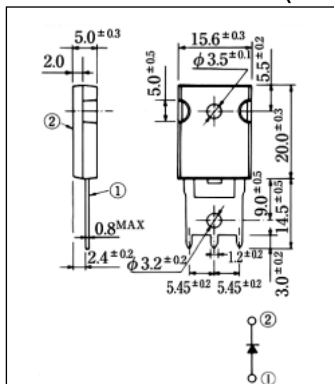
FRED

KSF30A40E

## ■最大定格 Maximum Ratings

| Item                                             | Symbol            | Conditions                                                              | Unit                        |
|--------------------------------------------------|-------------------|-------------------------------------------------------------------------|-----------------------------|
| くり返しピーク逆電圧<br>Repetitive Peak Reverse Voltage    | $V_{RRM}$         | 400                                                                     | V                           |
| 平均整流電流<br>Average Rectified Forward Current      | $I_O$             | 50Hz、正弦半波通電抵抗負荷<br>50Hz Half Sine Wave Resistive Load                   | $T_c=90^{\circ}\text{C}$ 30 |
| 実効順電流<br>R.M.S. Forward Current                  | $I_F(\text{RMS})$ | 47                                                                      | A                           |
| サーージ順電流<br>Surge Forward Current                 | $I_{FSM}$         | 400 50Hz正弦半波、1サイクル、非くり返し<br>50Hz Half Sine Wave, 1cycle, Non-repetitive | A                           |
| 動作接合温度範囲<br>Operating Junction Temperature Range | $T_{jw}$          | $-40\sim+150$                                                           | $^{\circ}\text{C}$          |
| 保存温度範囲<br>Storage Temperature Range              | $T_{stg}$         | $-40\sim+150$                                                           | $^{\circ}\text{C}$          |
| 締付トルク<br>Mounting torque                         | $F_{tor}$         | 推奨値<br>Recommended Value                                                | 0.5 N·m                     |

## ■OUTLINE DRAWING(mm)



■APPROX. NET WEIGHT:6g

## ■電氣的・熱的特性 Electrical/Thermal Characteristics

| Item                           | Symbol        | Conditions                                                                       | Min. | Typ. | Max. | Unit                        |
|--------------------------------|---------------|----------------------------------------------------------------------------------|------|------|------|-----------------------------|
| ピーク逆電流<br>Peak Reverse Current | $I_{RM}$      | $T_j=25^{\circ}\text{C}$ , $V_{RM}=V_{RRM}$                                      | —    | —    | 50   | $\mu\text{A}$               |
| ピーク順電圧<br>Peak Forward Voltage | $V_{FM}$      | $T_j=25^{\circ}\text{C}$ , $I_{FM}=30\text{A}$                                   | —    | —    | 1.25 | V                           |
| 逆回復時間<br>Reverse Recovery Time | $t_{rr}$      | $I_{FM}=10\text{A}$ , $-di/dt=50\text{A}/\mu\text{s}$ , $T_j=25^{\circ}\text{C}$ | —    | —    | 60   | ns                          |
| 熱抵抗<br>Thermal Resistance      | $R_{th(j-c)}$ | 接合部・ケース間<br>Junction to Case                                                     | —    | —    | 1.4  | $^{\circ}\text{C}/\text{W}$ |

## ■定格・特性曲線

FIG.1

順電圧特性  
FORWARD CURRENT VS. VOLTAGE

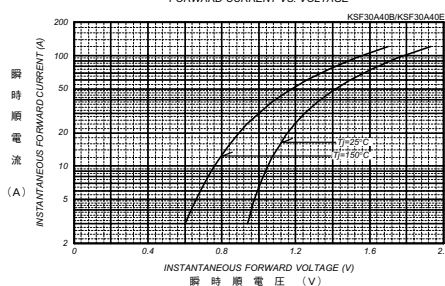


FIG.2

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

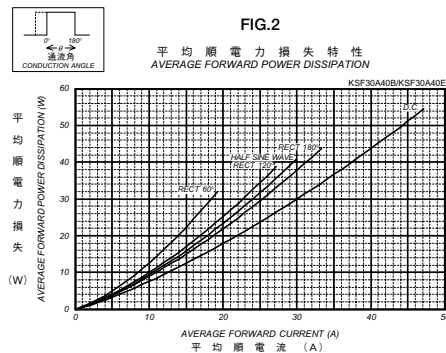


FIG.3

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

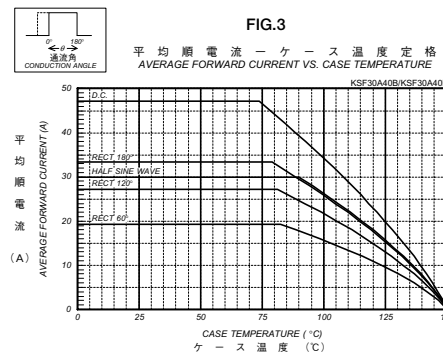


FIG.4

サーージ順電流定格  
SURGE CURRENT RATINGS  
t=50Hz Half Sine Wave, Non-Repetitive, No Load

