

10A 65V  $T_{jw}150^{\circ}\text{C}$ カソードコモン SBD  
Cathode common

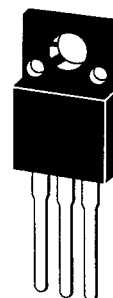
Fully Molded similar to TO-220AB

# FCQS10A065

## 仕様書 Specification.

日本インター株式会社  
Nihon Inter Electronics Corporation

構造 ショットキーバリアダイオード  
Construction Schottky Barrier Diode  
用途 高周波整流用  
Application High Frequency Rectification

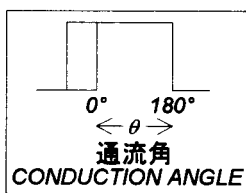
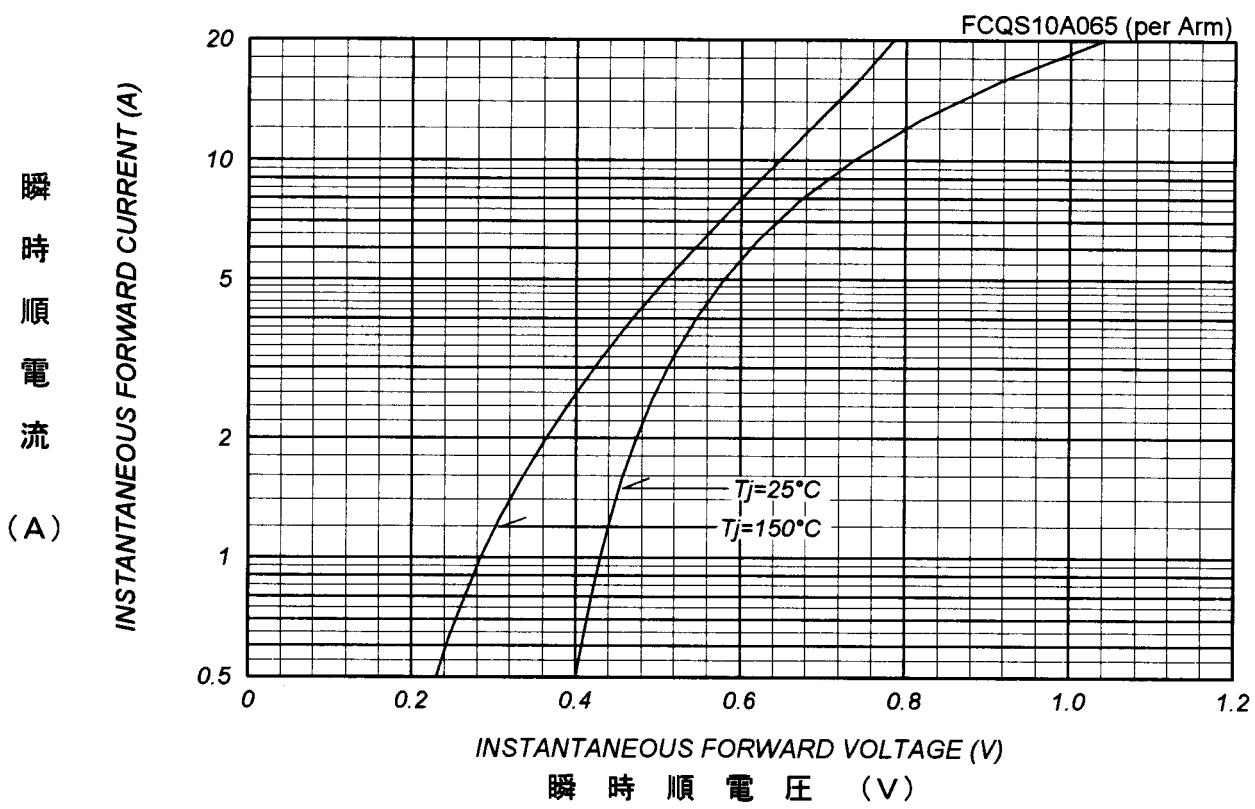
■ 最大定格 MAXIMUM RATINGS  $T_a=25^{\circ}\text{C}$ : Unless otherwise specified

| Item                                             | Symbol     | Condition                                                                                               | Max. Rated value | Unit               |
|--------------------------------------------------|------------|---------------------------------------------------------------------------------------------------------|------------------|--------------------|
| くり返しピーク逆電圧<br>Repetitive peak reverse voltage    | $V_{RRM}$  |                                                                                                         | 65               | V                  |
| 平均整流電流<br>Average rectified forward current      | $I_O$      | 50Hz 正弦全波,抵抗負荷<br>$T_c=127^{\circ}\text{C}$ $V_{RM}=30\text{V}$<br>50Hz full sine wave, Resistance load | 10               | A                  |
| 実効順電流<br>R.M.S. forward current                  | $I_{FRMS}$ |                                                                                                         | 11.1             | A                  |
| サージ順電流<br>Surge forward current                  | $I_{FSM}$  | 50Hz 正弦全波 1 サイクル 非くり返し<br>50Hz full sine wave 1cycle, non repetitive                                    | 120              | 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              | $T_{stg}$  |                                                                                                         | $-40\sim+150$    | $^{\circ}\text{C}$ |
| 締付けトルク<br>Mounting Torque                        | $F_{tor}$  | 推奨値<br>Recommended Value                                                                                | 0.5              | N·m                |

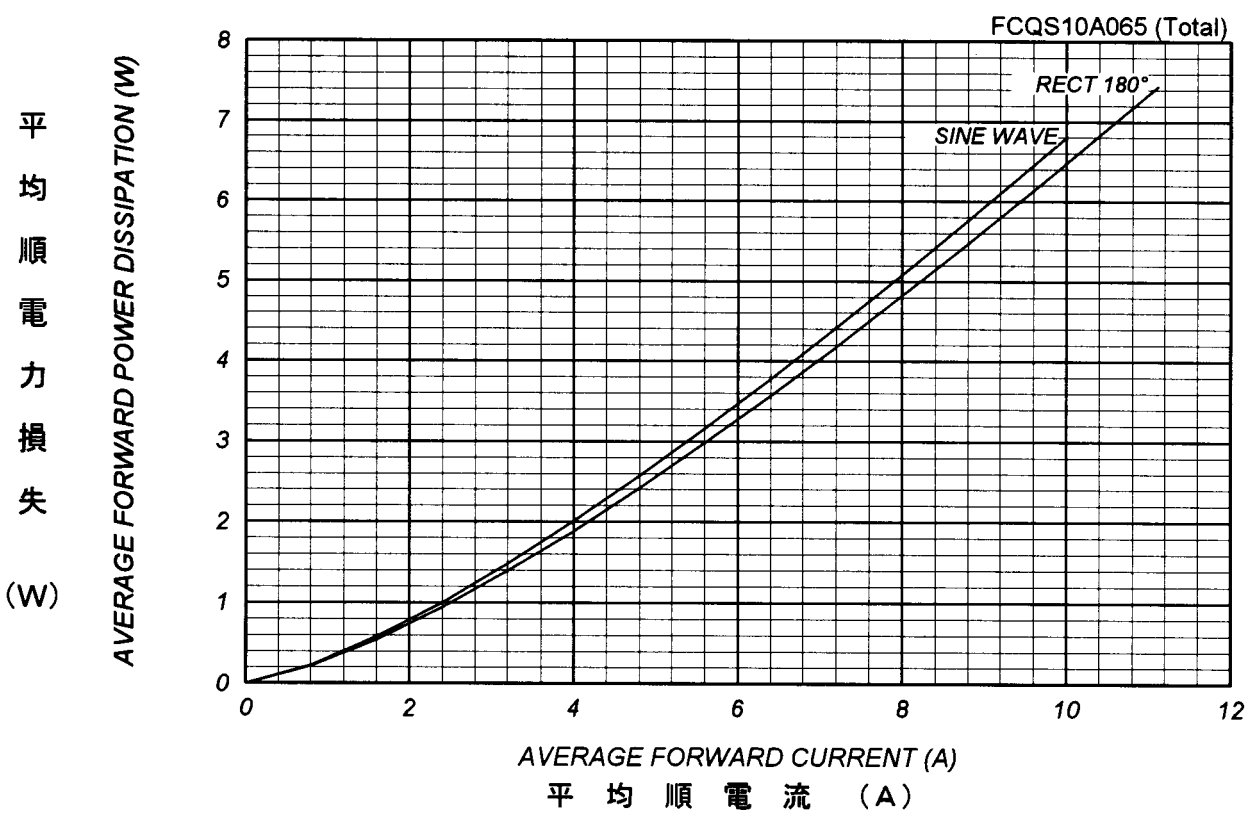
## ■ 電氣的・熱的特性 ELECTRICAL / THERMAL CHARACTERISTICS

| Item                           | Symbol        | Condition                                                        | Min. | Typ. | Max. | Unit                 |
|--------------------------------|---------------|------------------------------------------------------------------|------|------|------|----------------------|
| ピーク逆電流<br>Peak reverse current | $I_{RM}$      | $T_j=25^{\circ}\text{C}$ $V_{RM}=V_{RRM}$ 1 素子あたり<br>per diode   | —    | —    | 400  | $\mu\text{A}$        |
| ピーク順電圧<br>Peak forward voltage | $V_{FM}$      | $T_j=25^{\circ}\text{C}$ $I_{FM}=5\text{A}$ 1 素子あたり<br>per diode | —    | —    | 0.58 | V                    |
| 熱抵抗<br>Thermal resistance      | $R_{th(j-c)}$ | 接合部・ケース間<br>Junction to case                                     | —    | —    | 3.0  | $^{\circ}\text{C/W}$ |
| 熱抵抗<br>Thermal resistance      | $R_{th(c-f)}$ | ケース・フィン間<br>Case to fin                                          | —    | —    | 1.5  | $^{\circ}\text{C/W}$ |

順電壓特性  
FORWARD CURRENT VS. VOLTAGE

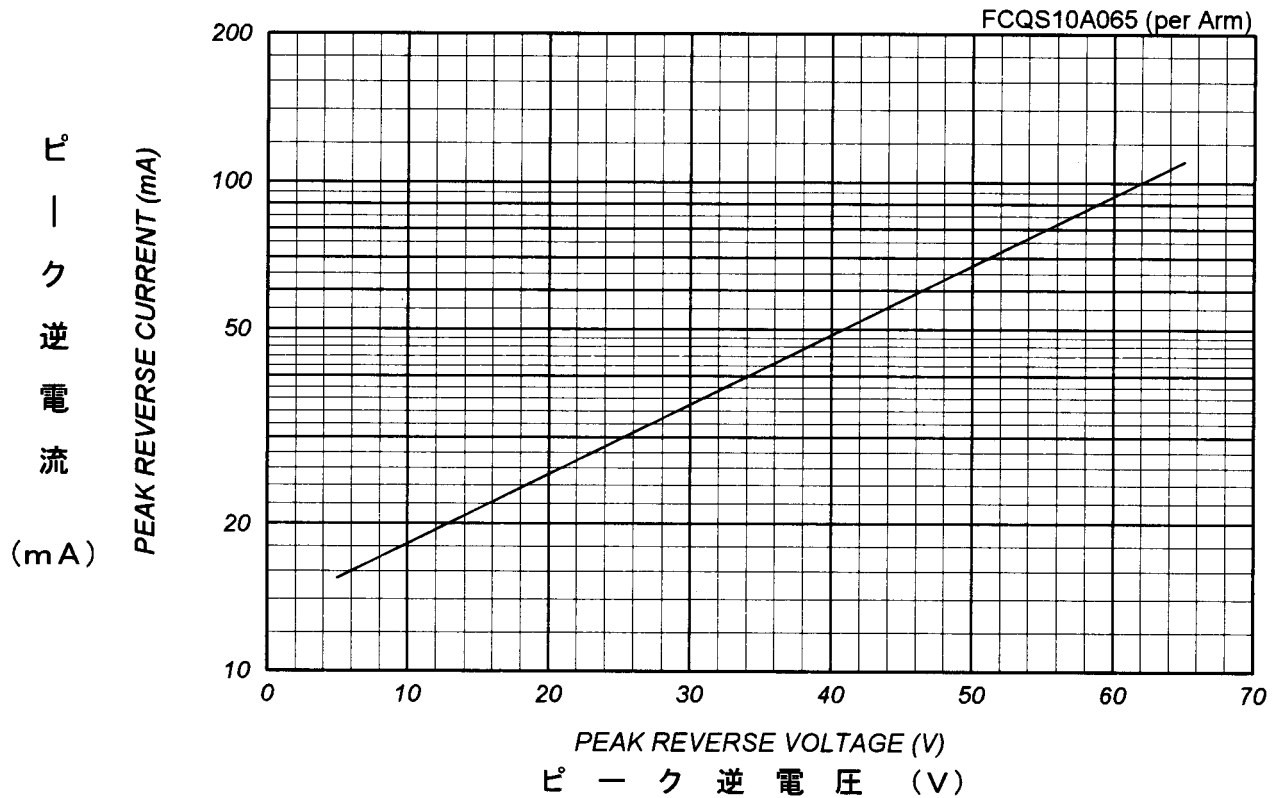


平均順電力損失特性  
AVERAGE FORWARD POWER DISSIPATION

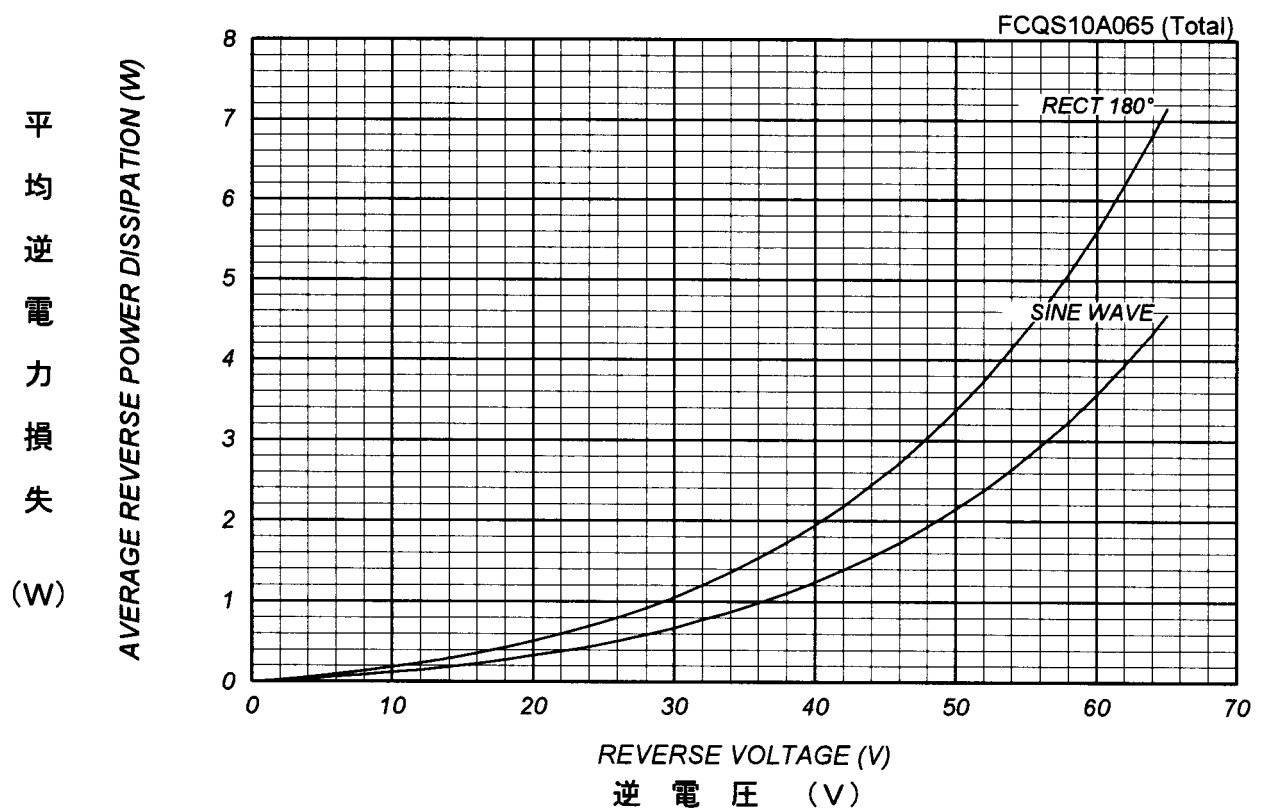


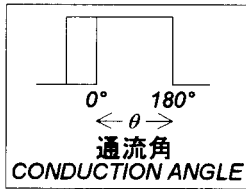
ピーク逆電流 — ピーク逆電圧特性  
 PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

$T_j = 150^\circ\text{C}$



平均逆電力損失  
 AVERAGE REVERSE POWER DISSIPATION

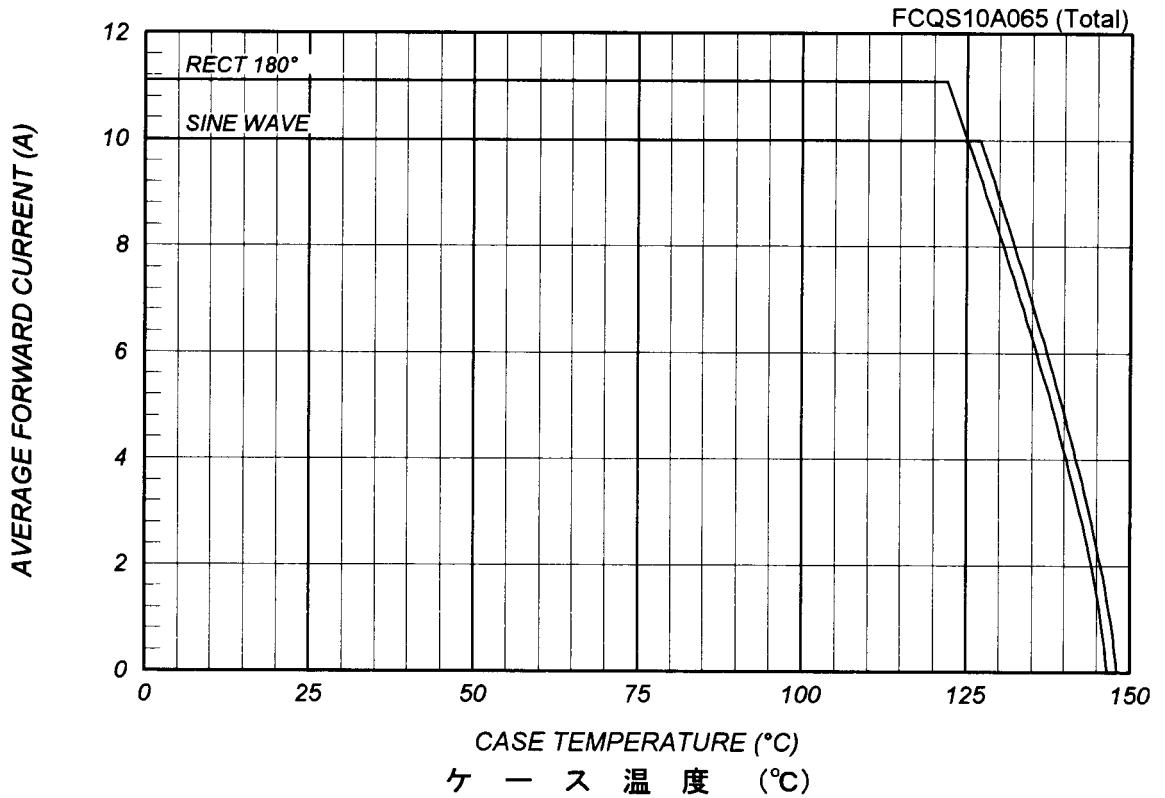




# 平均順電流－ケース温度定格 AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM}=30V$

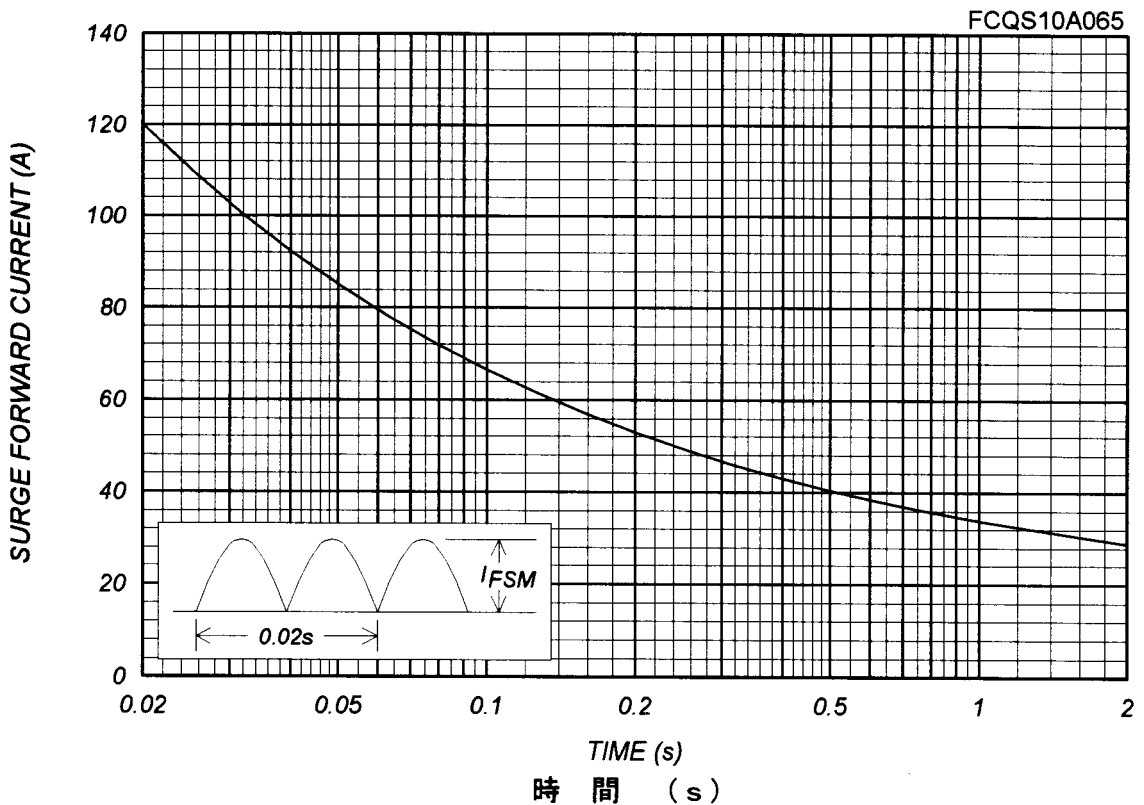
平均順電流  
 (A)



## サージ順電流定格 SURGE CURRENT RATINGS

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

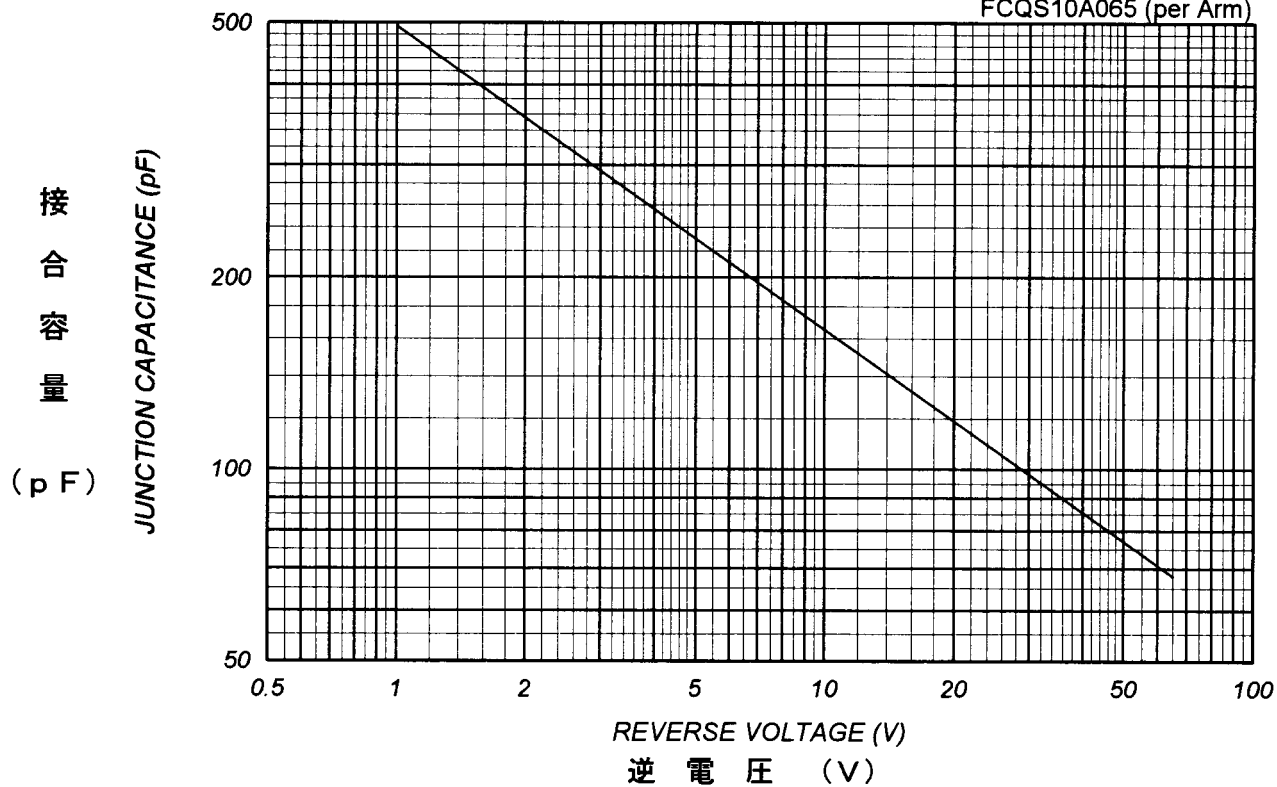
サージ順電流  
 (A)

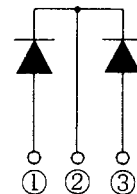
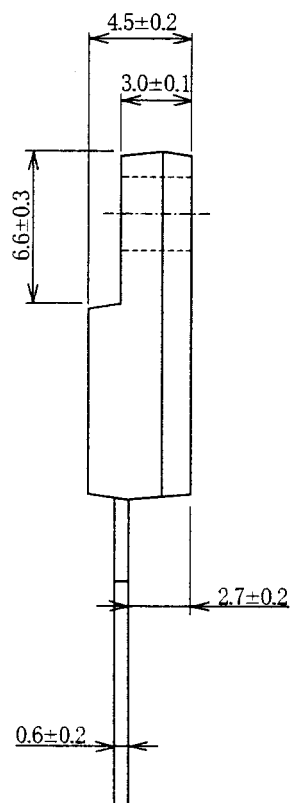
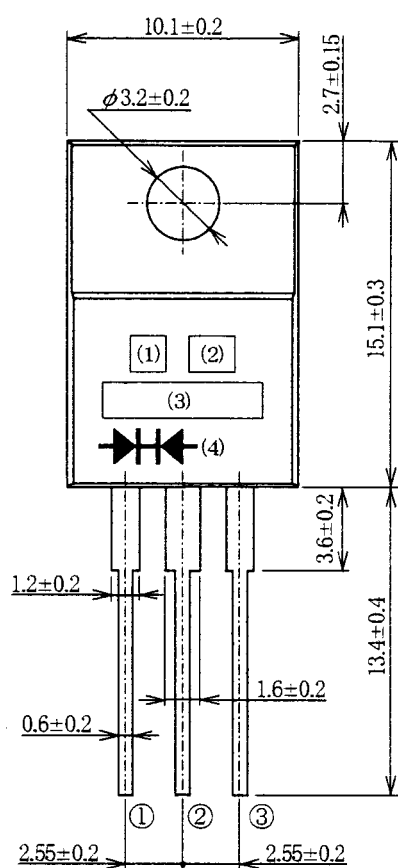


接 合 容 量 特 性  
JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

$T_j=25^{\circ}\text{C}$ ,  $V_m=20\text{mV}_{\text{RMS}}$ ,  $f=100\text{kHz}$ , Typical Value

FCQS10A065 (per Arm)





#### 表示 Marking

(1) 社名略マーク N Manufacturer's Mark N

(2) ロット番号 Lot No.

|     |               |   |   |   |   |   |   |   |   |   |    |    |    |
|-----|---------------|---|---|---|---|---|---|---|---|---|----|----|----|
| 製造年 | 西暦年代ノ下二桁ヲ表示スル |   |   |   |   |   |   |   |   |   |    |    |    |
| 製造月 | 月             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|     | 記号            | A | B | C | D | E | F | G | H | I | J  | K  | L  |

(例) 2007年7月→7G

(3) 型名 Type

FCQS10A「」

(4) 極性 Polarity

#### 材料 Materials

○モールド材 Mold

エポキシ樹脂(UL94V-0認定品)

Epoxy Resin (UL94V-0 recognized)

○リード端子 Lead

銅-ニッケルメッキ+錫メッキ

Cu-Ni plated+Sn plated

質量 Weight : 1.75g