

30A 120V $T_{jw}150^{\circ}\text{C}$

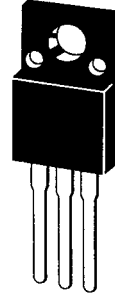
カソードコモン SBD
Cathode common

Fully Molded similar to TO-220AB

FCHS30A12 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



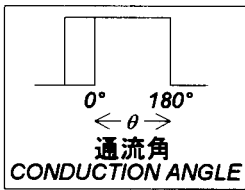
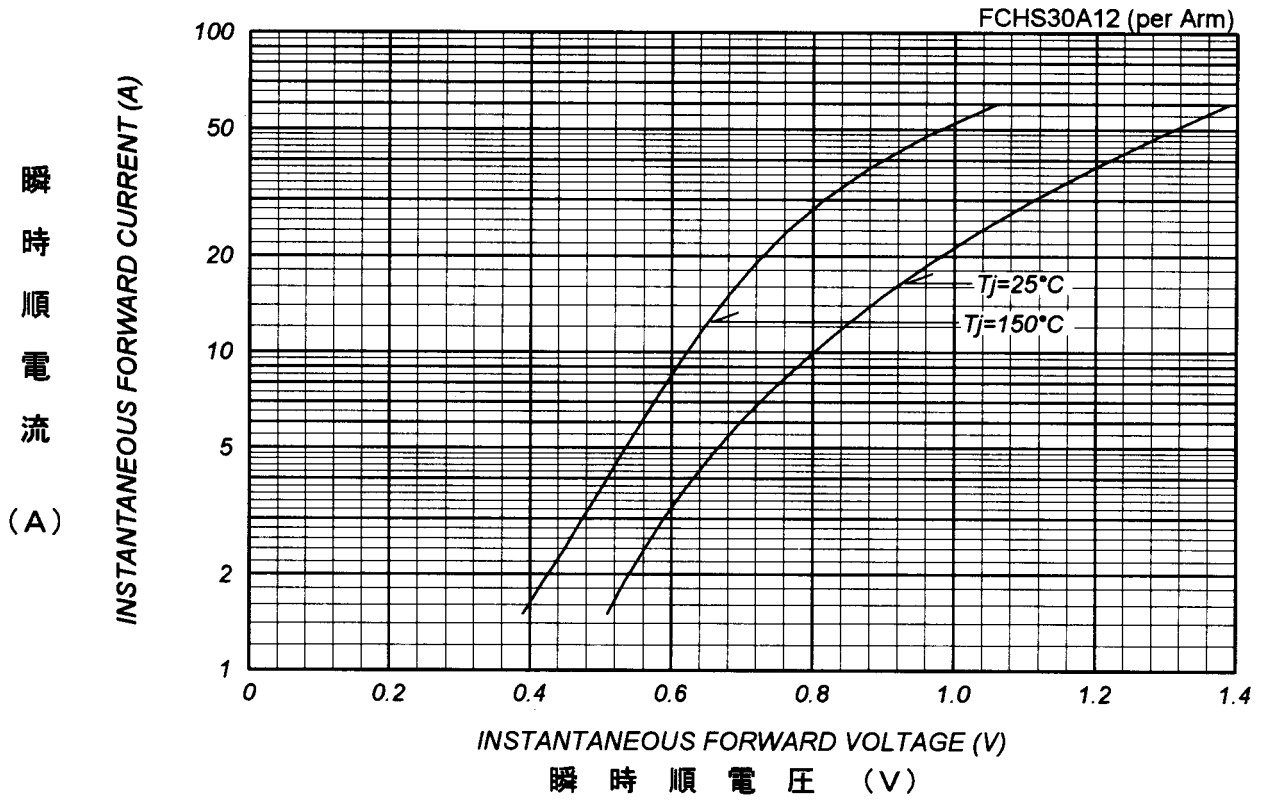
■ 最大定格 MAXIMUM RATINGS $T_a=25^{\circ}\text{C}$: Unless otherwise specified

| Item | Symbol | Condition | Max. Rated value | Unit |
|--|--------------|---|------------------|--------------------|
| くり返しピーク逆電圧 Repetitive peak reverse voltage | V_{RRM} | | 120 | V |
| 平均整流電流 Average rectified forward current | I_O | 50Hz 正弦全波,抵抗負荷 $T_c=107^{\circ}\text{C}$ $V_{RM}=60\text{V}$ 50Hz full sine wave, Resistance load | 30 | A |
| 実効順電流 R.M.S. forward current | $I_{F(RMS)}$ | | 33.3 | A |
| サージ順電流 Surge forward current | I_{FSM} | 50Hz 正弦全波 1 サイクル 非くり返し 50Hz full sine wave 1cycle, non-repetitive | 200 | A |
| 動作接合温度範囲 Operating junction temperature range | T_{jw} | | -40~+150 | $^{\circ}\text{C}$ |
| 保存温度範囲 Storage temperature range | T_{stg} | | -40~+150 | $^{\circ}\text{C}$ |
| 締付けトルク Mounting Torque | F_{tor} | 推奨値 Recommended Value | 0.5 | N·m |

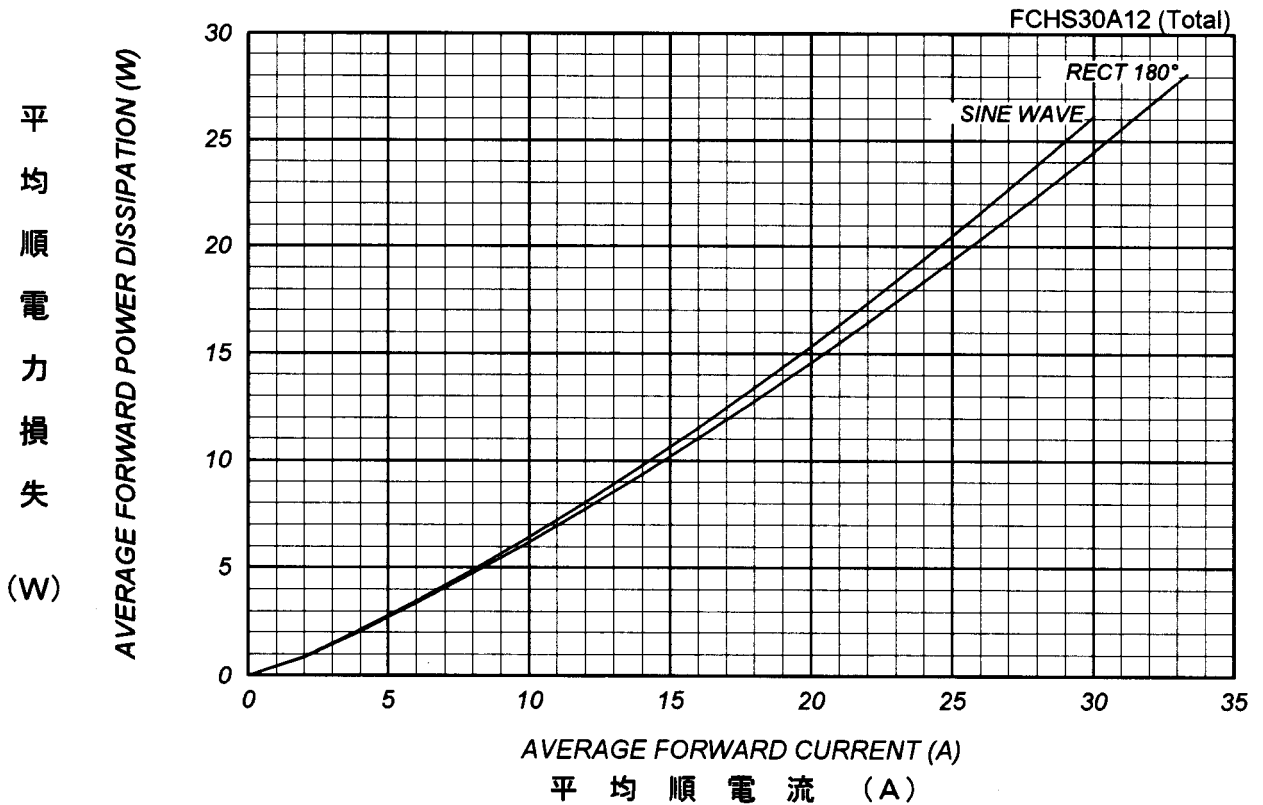
■ 電氣的・熱的特性 ELECTRICAL/THERMAL CHARACTERISTICS

| Item | Symbol | Condition | Min. | Typ. | Max. | Unit |
|--------------------------------|---------------|---|------|------|------|-----------------------------|
| ピーク逆電流 Peak reverse current | I_{RM} | $T_j=25^{\circ}\text{C}$ $V_{RM}=V_{RRM}$ 1 素子あたり per diode | — | — | 100 | μA |
| ピーク順電圧 Peak forward voltage | V_{FM} | $T_j=25^{\circ}\text{C}$ $I_{FM}=15\text{A}$ 1 素子あたり per diode | — | — | 0.90 | V |
| 熱抵抗 Thermal resistance | $R_{th(j-c)}$ | 接合部・ケース間 Junction to case | — | — | 1.5 | $^{\circ}\text{C}/\text{W}$ |
| 熱抵抗 Thermal resistance | $R_{th(c-f)}$ | ケース・フィン間 Case to fin | — | — | 1.5 | $^{\circ}\text{C}/\text{W}$ |

順電壓特性
FORWARD CURRENT VS. VOLTAGE

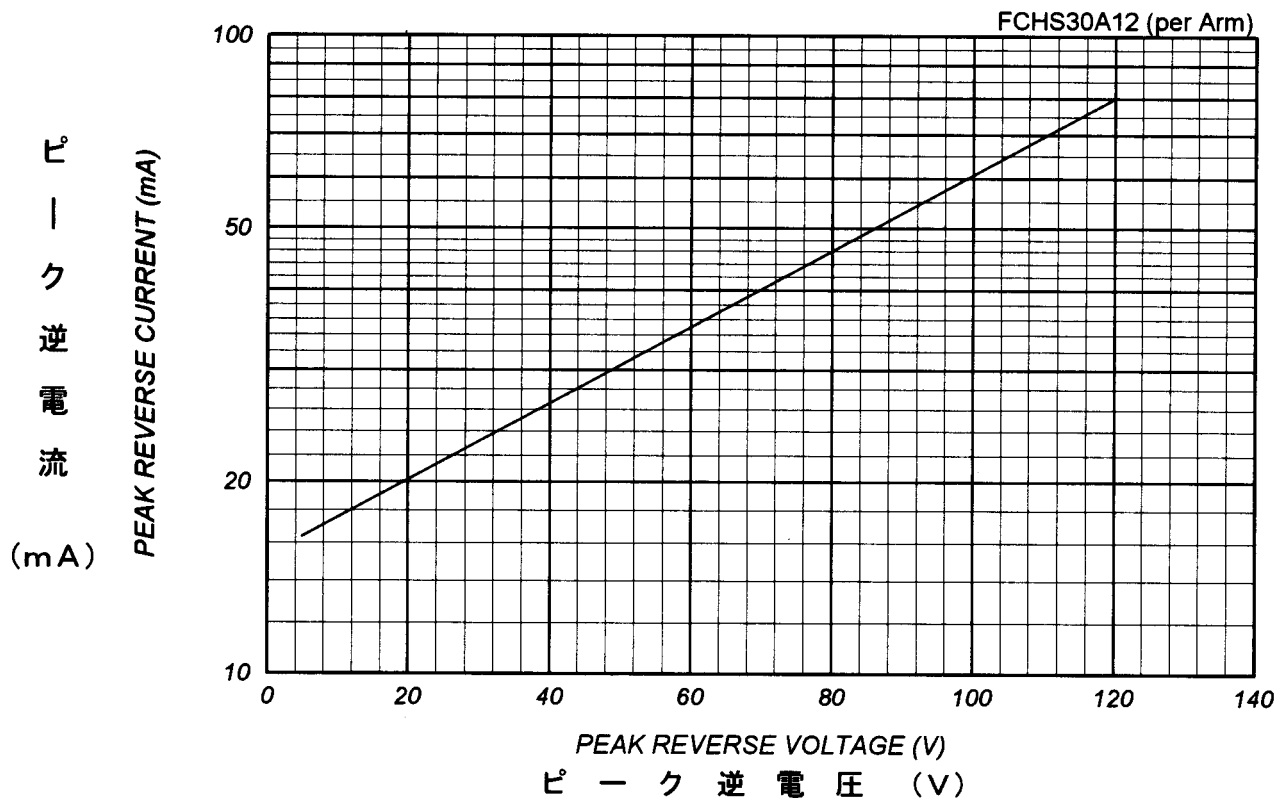


平均順電力損失特性
AVERAGE FORWARD POWER DISSIPATION

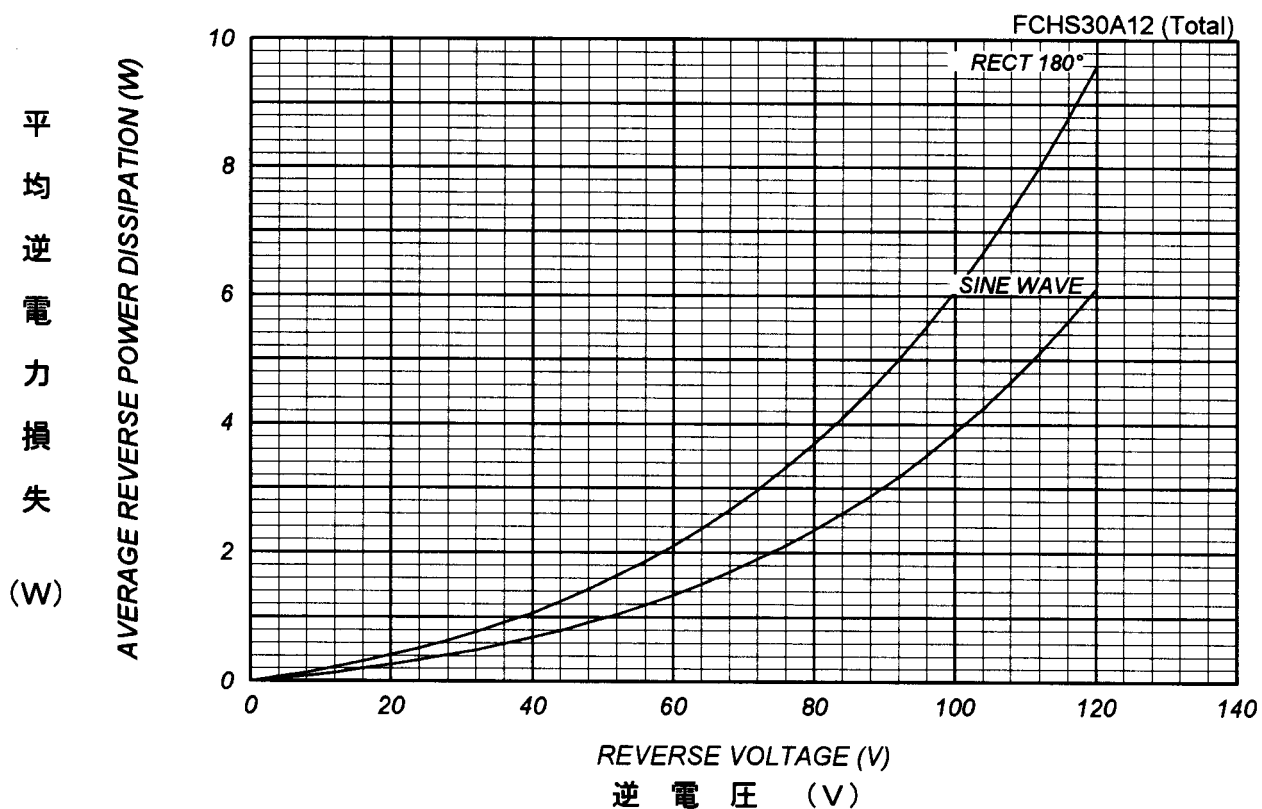


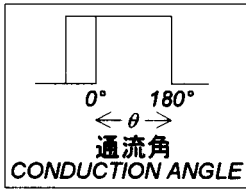
ピーク逆電流 - ピーク逆電圧特性
 PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

T_j = 150 °C



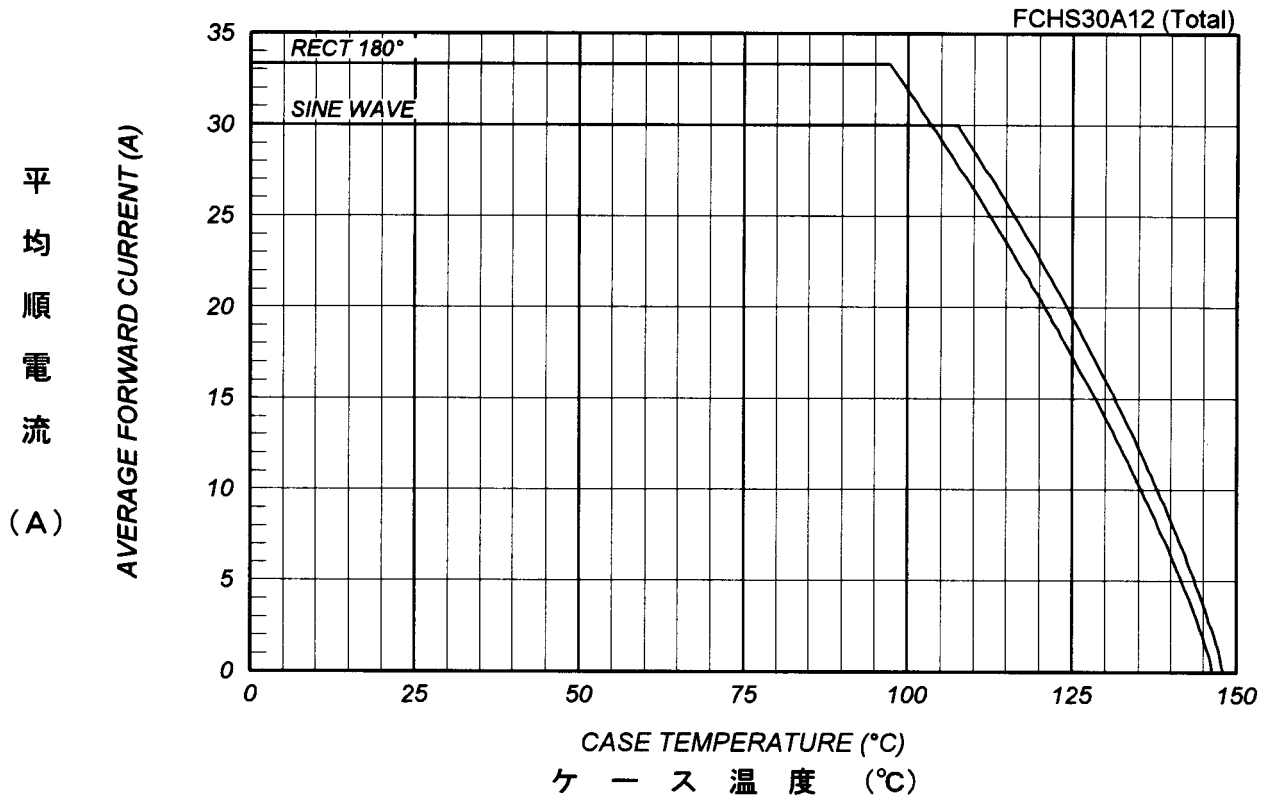
平均逆電力損失
 AVERAGE REVERSE POWER DISSIPATION





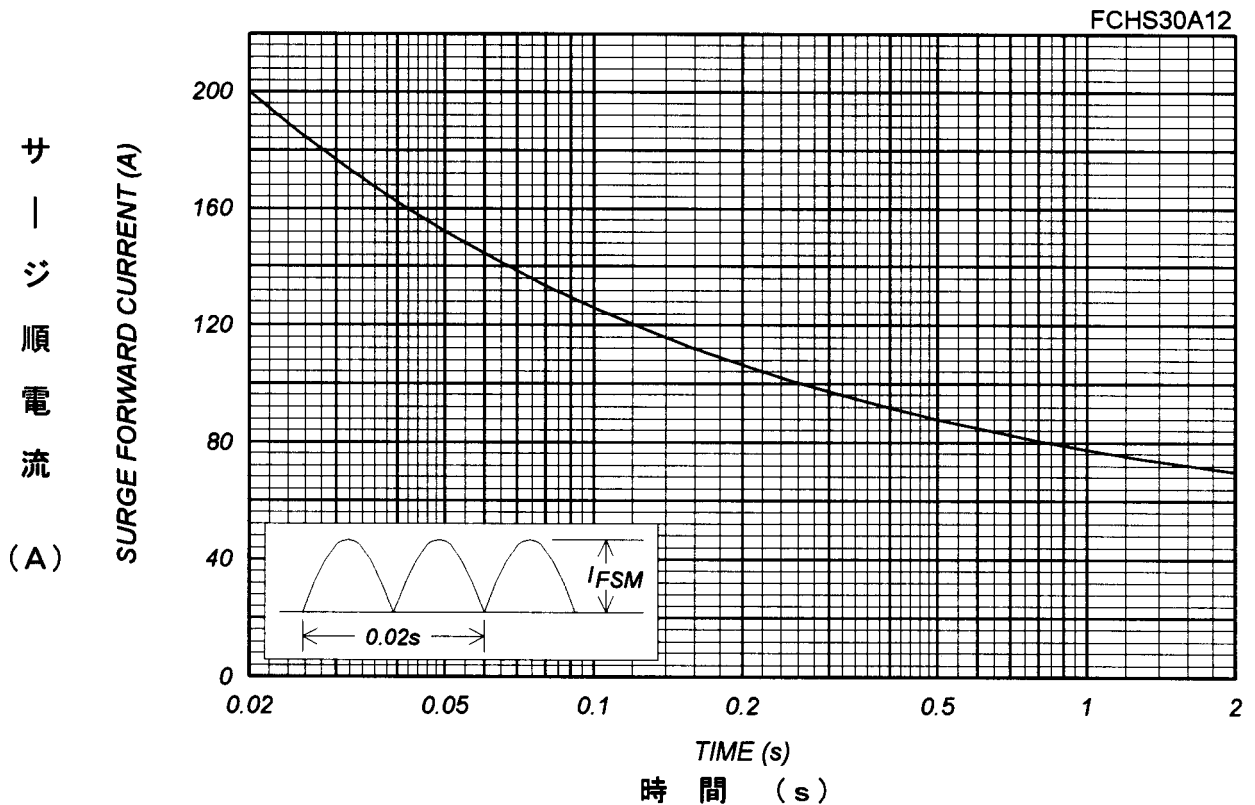
平均順電流 - ケース温度定格
AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM}=60V$



サージ順電流定格
SURGE CURRENT RATINGS

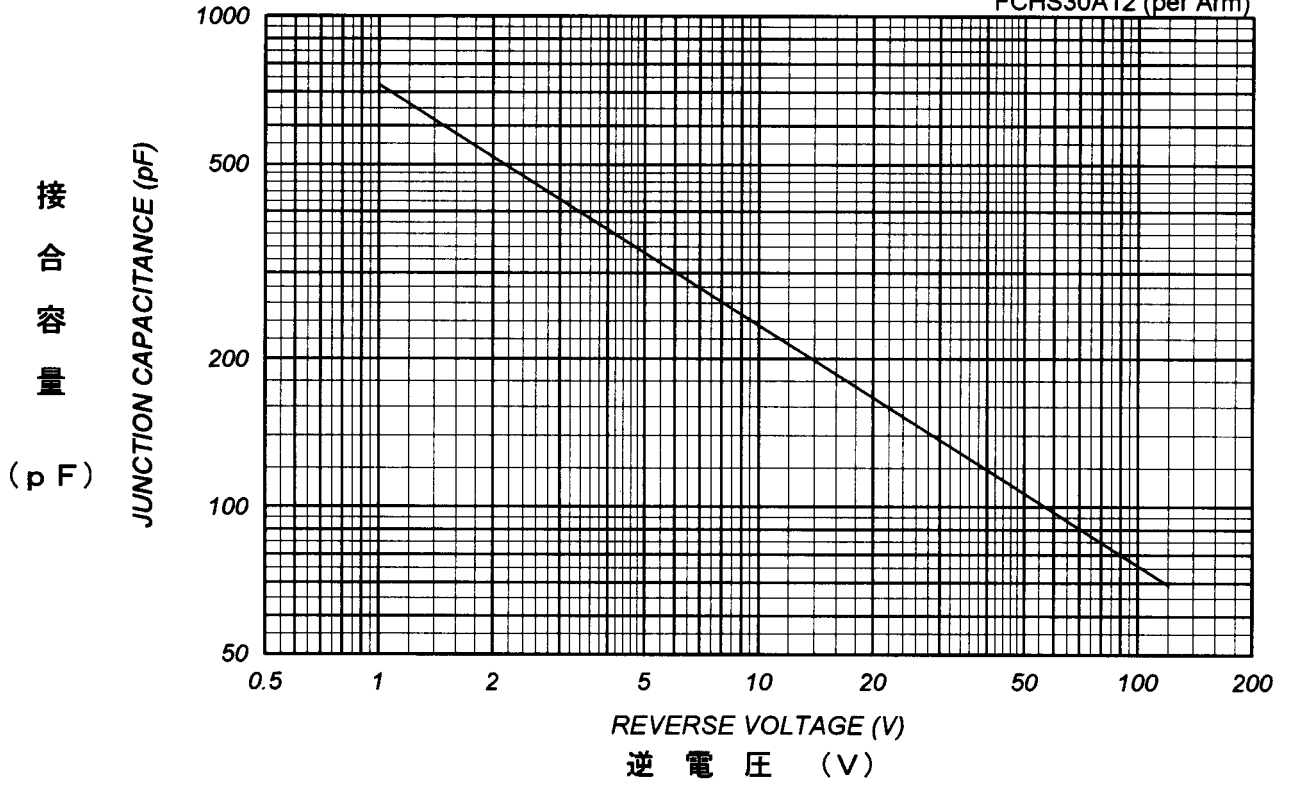
f=50Hz, Half Sine Wave, Non-Repetitive, No Load

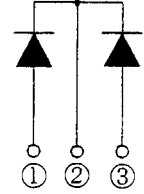
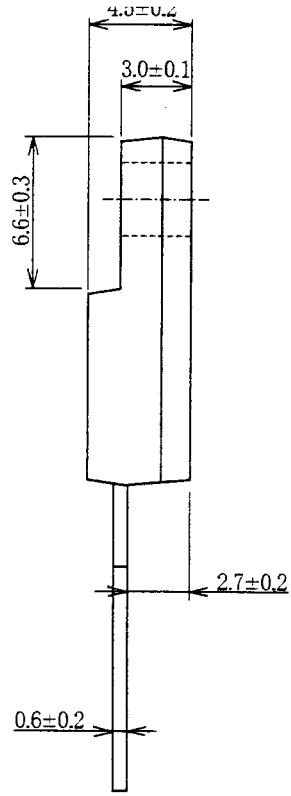
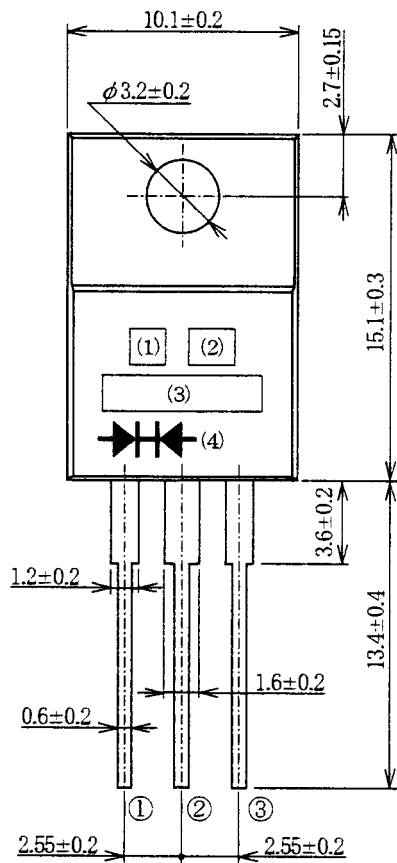


接 合 容 量 特 性
JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

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

FCHS30A12 (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 | 西暦年代ノ下一桁ヲ表示スル | | | | | | | | | | | | |
| 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
FCHS30A「」
- (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