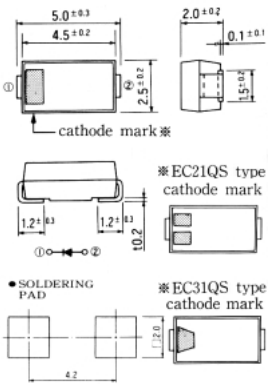
# 3A Avg. 20 Volts SBD EC30LA02

## ■最大定格 Maximum Ratings

| Item | Symbol | Conditions | | | Unit |
|---|---|---|---|---|---|
| くり返しピーク逆電圧 Repetitive Peak Reverse Voltage | $V_{RRM}$ | 20 | | | V |
| 非くり返しピーク逆電圧 ※1 Non-repetitive Peak Reverse Voltage | $V_{RSM}$ | 25 | | | V |
| 平均整流電流 Average Rectified Forward Current | $I_O$ | 50Hz、正弦半波通電抵抗負荷 50Hz Half Sine Wave Resistive Load | Ta=25℃ *2 | 2.1 | A |
| | | | Tl=85℃ Tl:lead Temperature | 3.0 | A |
| 実効順電流 R.M.S. Forward Current | $I_{F(RMS)}$ | 4.71 | | | A |
| サージ順電流 Surge Forward Current | $I_{FSM}$ | 50 50Hz正弦半波，1サイクル，非くり返し 50Hz Half Sine Wave,1cycle, Non-repetitive | | | A |
| 動作接合温度範囲 Operating Junction Temperature Range | $T_{jw}$ | −40～+125 | | | ℃ |
| 保存温度範囲 Storage Temperature Range | $T_{stg}$ | −40～+125 | | | ℃ |

## ■OUTLINE DRAWING(mm)




■APPROX. NET WEIGHT:0.06 g

## ■電気的・熱的特性 Electrical/Thermal Characteristics

| Item | Symbol | Conditions | | Min. | Typ. | Max. | Unit |
|---|---|---|---|---|---|---|---|
| ピーク逆電流 Peak Reverse Current | $I_{RM}$ | $T_j$=25℃, $V_{RM}$=$V_{RRM}$ | | — | — | 3 | mA |
| ピーク順電圧 Peak Forward Voltage | $V_{FM}$ | $T_j$=25℃, $I_{FM}$=3.0A | | — | — | 0.39 | V |
| 熱抵抗 Thermal Resistance | $R_{th(j-a)}$ | 接合部・周囲間 Junction to Ambient | Alumina Substrate Mounted*2 | — | — | 108 | ℃/W |
| | $R_{th(j-l)}$ | 接合部・リード間 Junction to Lead | — | | — | 23 | ℃/W |

*1：パルス幅1μs以下、Duty 1/50以下 Pulse Width ≦1μs、Duty≦1/50
*2：アルミナ基板実装/Alumina Substrate mounted (Soldering Lands=2×2mm, Both Sides)
※ 平均順電流定格図は、逆電力損失を含まない値です。実使用に際しましては、逆電力損失による熱暴走にご注意ください。

## ■定格・特性曲線

FIG.1
順電圧特性
FORWARD CURRENT VS. VOLTAGE

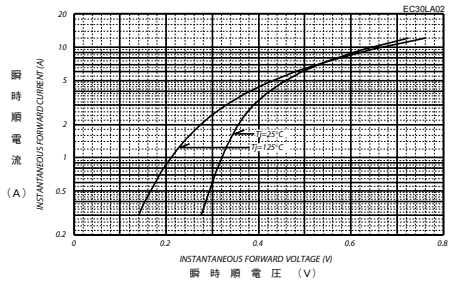



FIG.2
平均順電力損失特性
AVERAGE FORWARD POWER DISSIPATION

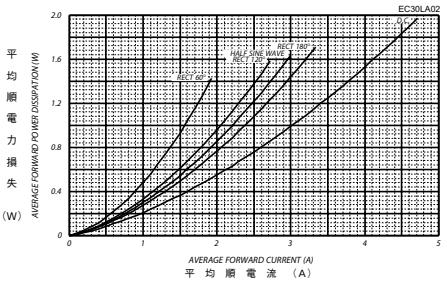



FIG.3
ピーク逆電流 − ピーク逆電圧特性
PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

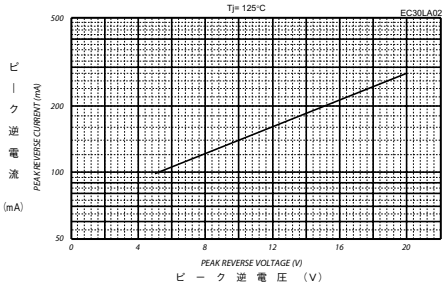



FIG.4
平均逆電力損失
AVERAGE REVERSE POWER DISSIPATION

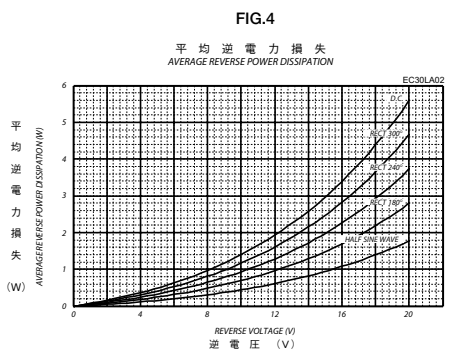



FIG.5
平均順電流 − 周囲温度定格
AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

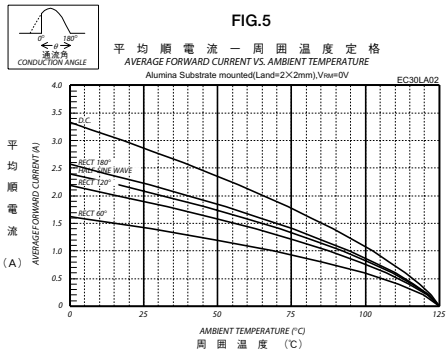



FIG.6
平均順電流 − リード温度定格
AVERAGE FORWARD CURRENT VS. LEAD TEMPERATURE

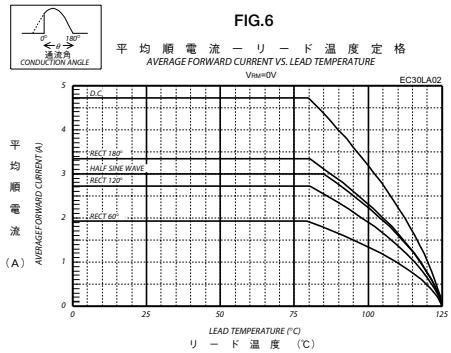



FIG.7
サージ順電流定格
SURGE CURRENT RATINGS

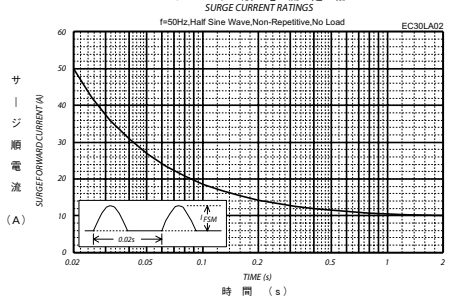



FIG.8
接合容量特性
JUNCTION CAPACITANCE VS. REVERSE VOLTAGE