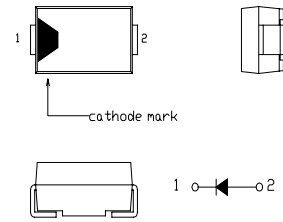


SBD Type : EC30HA04

OUTLINE DRAWING

構造 : 表面実装型、ショットキバリアダイオード (SBD)
 Construction: Surface Mounting, Schottky Barrier Diode

用途 : 高周波整流用
 Application : High Frequency Rectification



最大定格 / Maximum Ratings

Approx Net Weight:0.06g

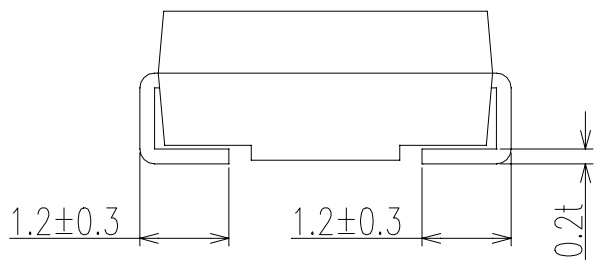
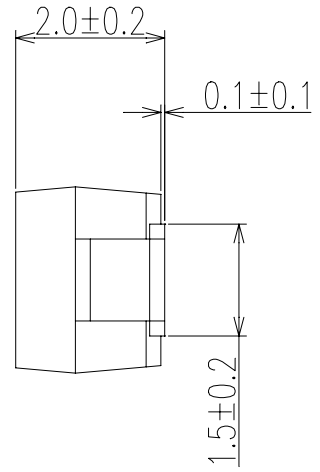
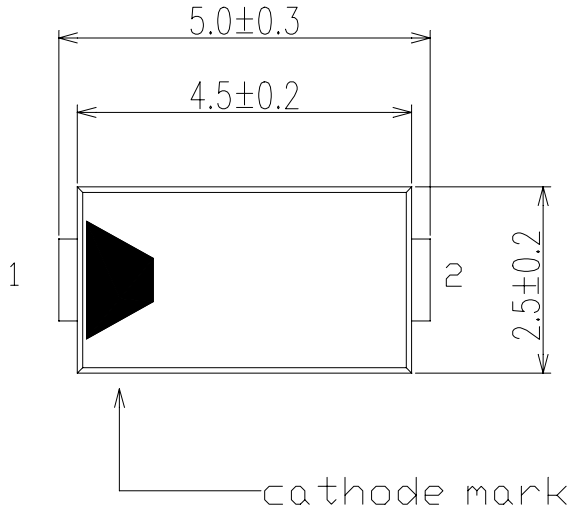
| Rating | Symbol | EC30HA04 | | Unit |
|--|--------------|--------------|--|------|
| くり返しピーク逆電圧 Repetitive Peak Reverse Voltage | V_{RRM} | 40 | | V |
| くり返しピークサージ逆電圧 Repetitive peak surge reverse voltage | V_{RRSM} | 45 | パルス幅1us以下、デューティー1/50以下 Pulse width 1us、Duty 1/50 | V |
| 平均整流電流 Average Rectified Output Current | I_O | 1.69 | Ta=25 *1 50Hz、正弦半波通電 Half Sine Wave | A |
| | | 3.0 | TI=96 (TI:Lead Temperature) 抵抗負荷 Resistive Load | A |
| 実効順電流 RMS Forward Current | $I_{F(RMS)}$ | 4.71 | | A |
| サージ順電流 Surge Forward Current | I_{FSM} | 60 | 50 Hz 正弦半波, 1サイクル, 非くり返し Half Sine Wave, 1cycle, Non-repetitive | A |
| 動作接合温度範囲 Operating Junction Temperature Range | Tjw | - 40 ~ + 150 | | |
| 保存温度範囲 Storage Temperature Range | Tstg | - 40 ~ + 150 | | |

電氣的・熱的特性 / Electrical・Thermal Characteristics

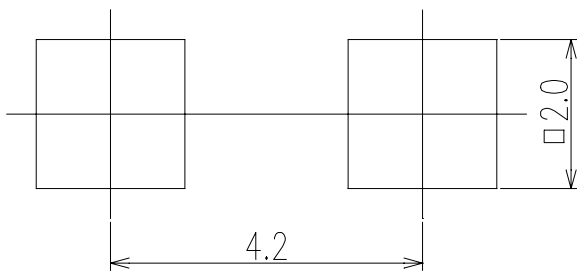
| Characteristics | Symbol | Conditions | Min. | Typ. | Max. | Unit |
|--------------------------------|--------------------------------|--|------|------|------|---------|
| ピーク逆電流 Peak Reverse Current | I_{RM} | Tj=25 , $V_{RM} = V_{RRM}$ | - | - | 500 | μA |
| ピーク順電圧 Peak Forward Voltage | V_{FM} | Tj=25 , $I_{FM} = 3 A$ | - | - | 0.59 | V |
| 熱抵抗 Thermal Resistance | 接合部・周囲間 Junction to Ambient | Rth(j-a) Alumina Substrate Mounted *1 | - | - | 108 | /W |
| | 接合部・リード間 Junction to Lead | Rth(j-l) - | - | - | 23 | /W |

*1:アルミナ基板実装/Alumina Substrate mounted (Soldering Lands= 2 × 2 mm , Both Sides)

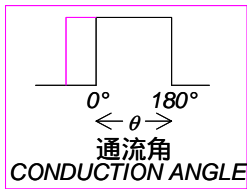
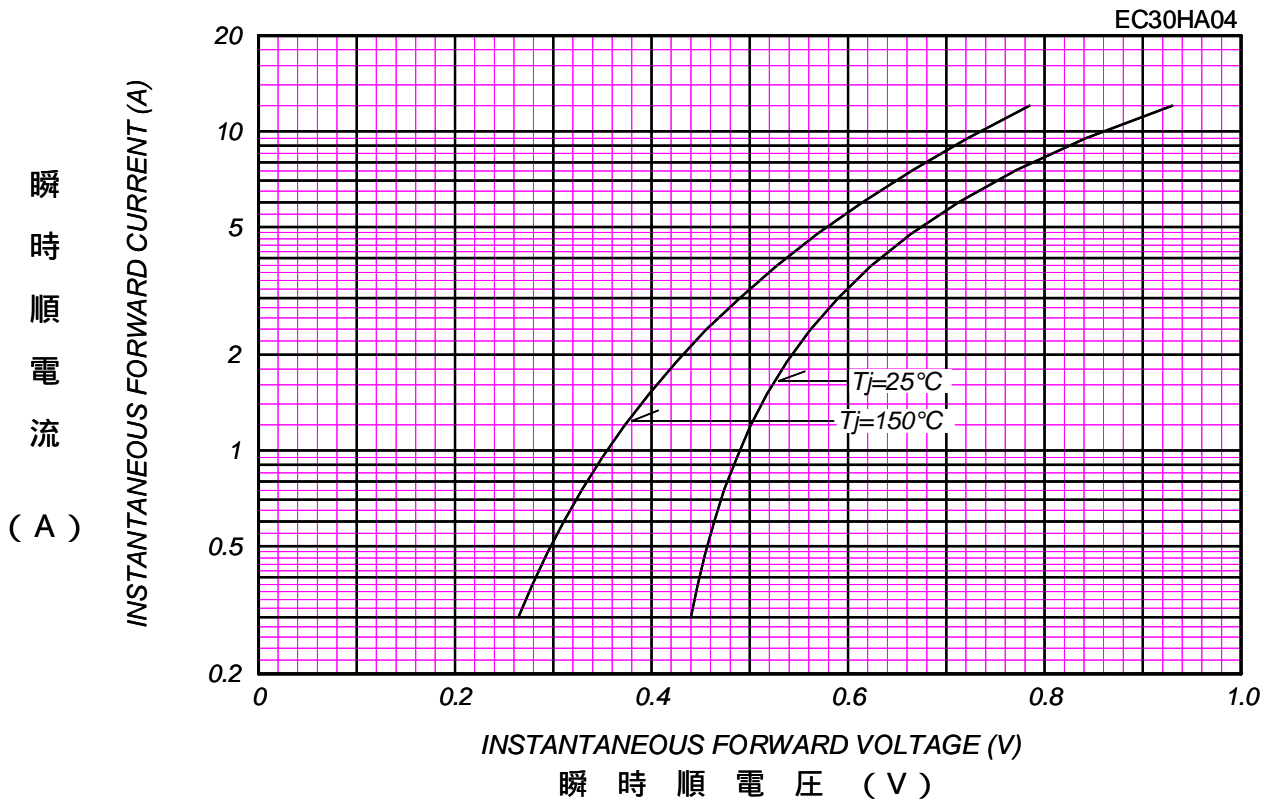
EC30HA_ 外形図 (単位: mm)



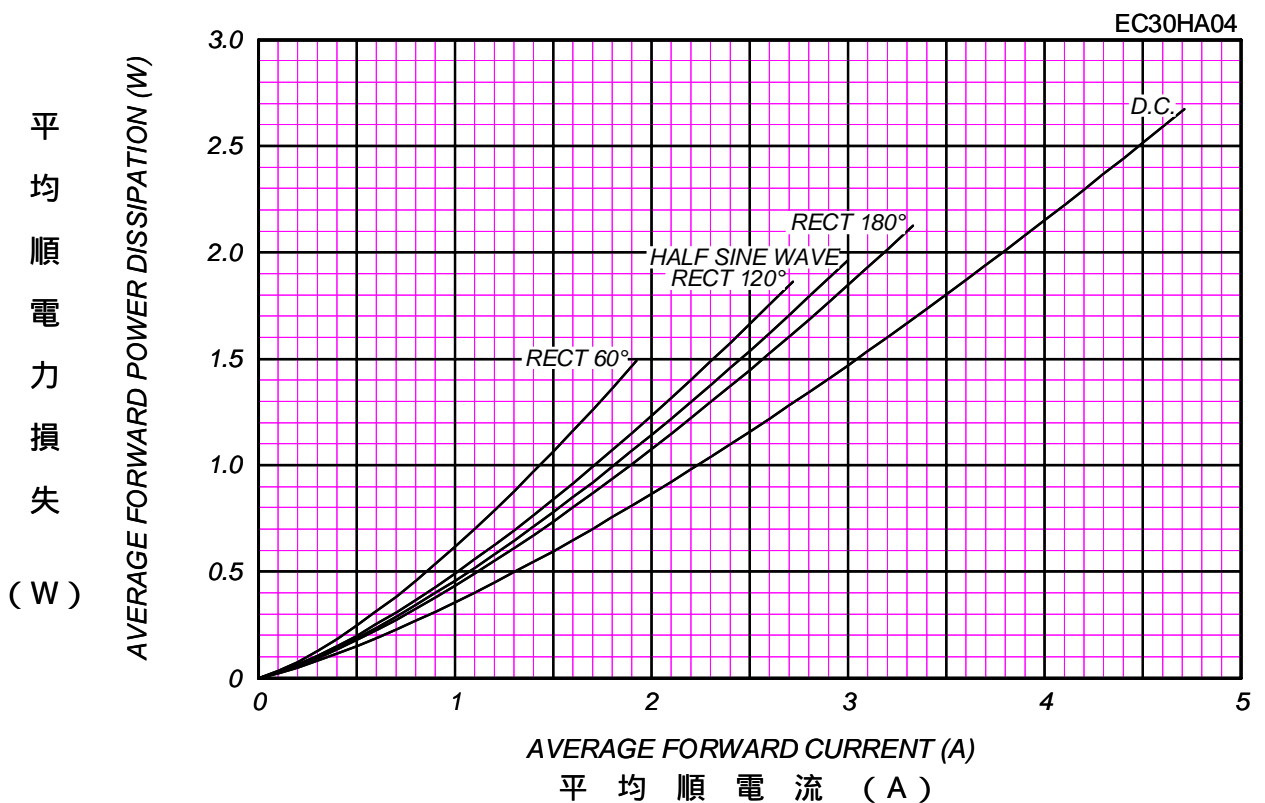
SOLDERING PAD



順電壓特性
FORWARD CURRENT VS. VOLTAGE

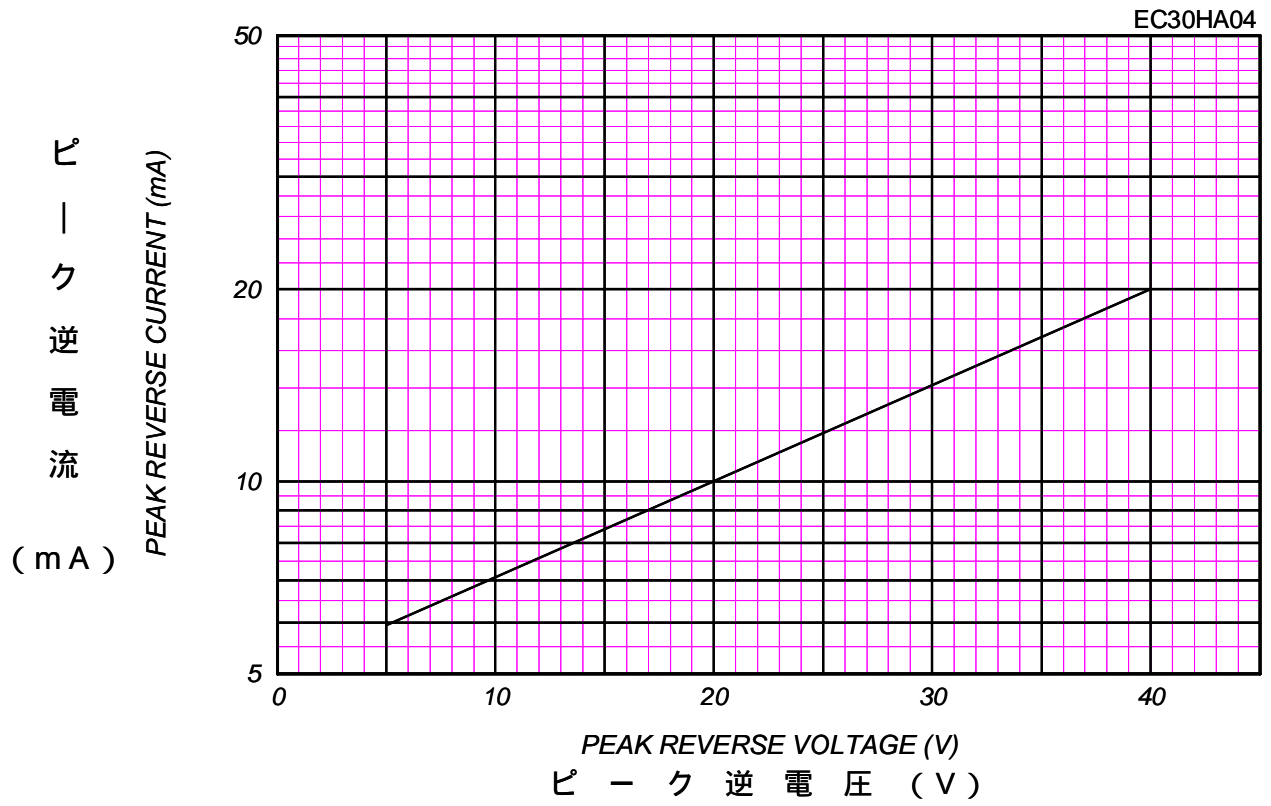


平均順電力損失特性
AVERAGE FORWARD POWER DISSIPATION

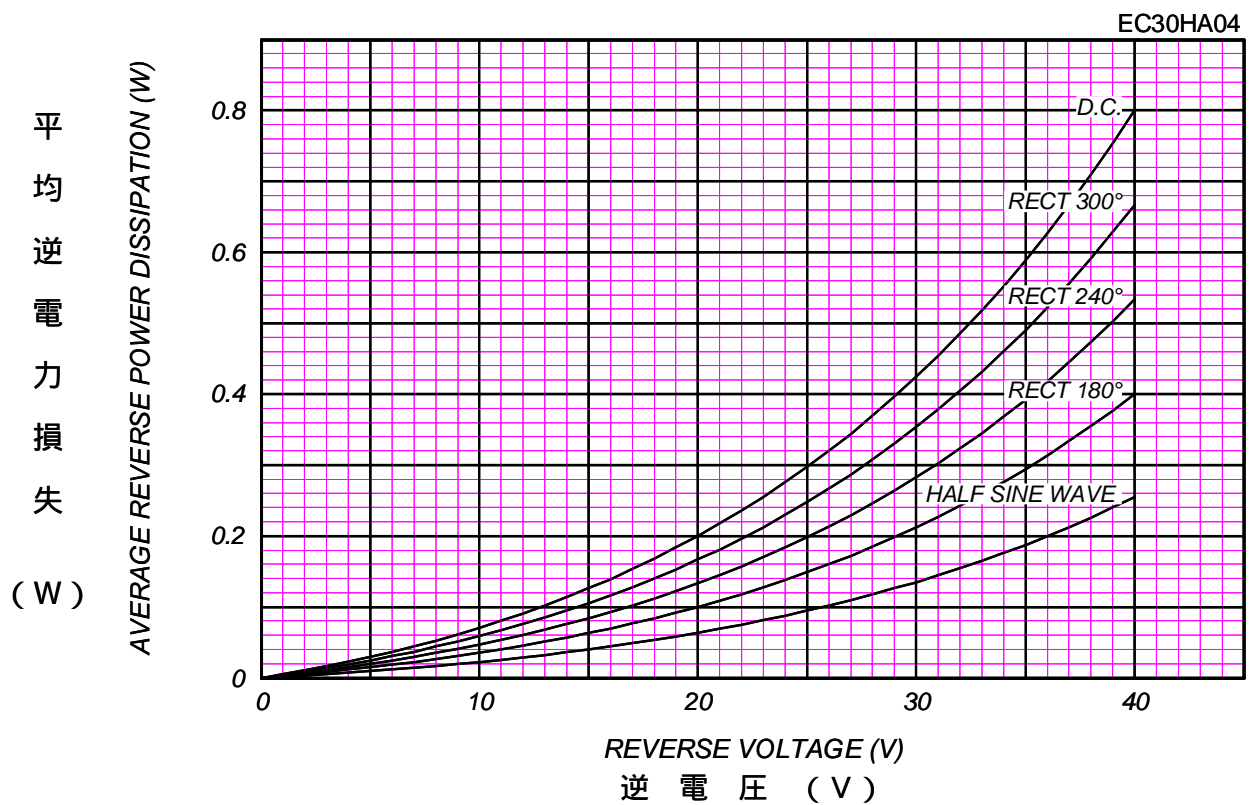


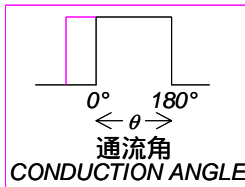
ピーク逆電流 - ピーク逆電圧特性
 PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

T_j = 150 °C



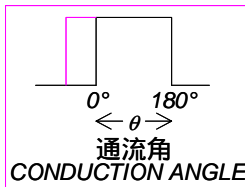
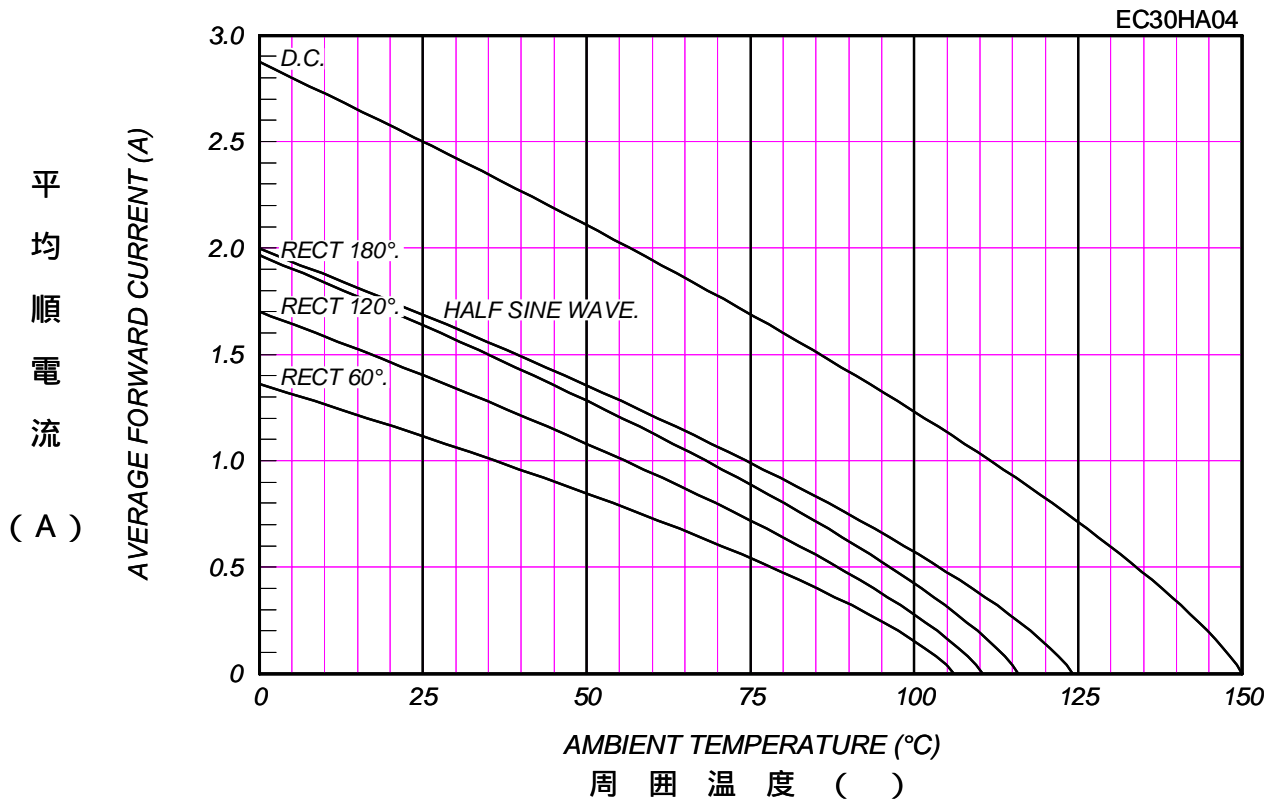
平均逆電力損失
 AVERAGE REVERSE POWER DISSIPATION





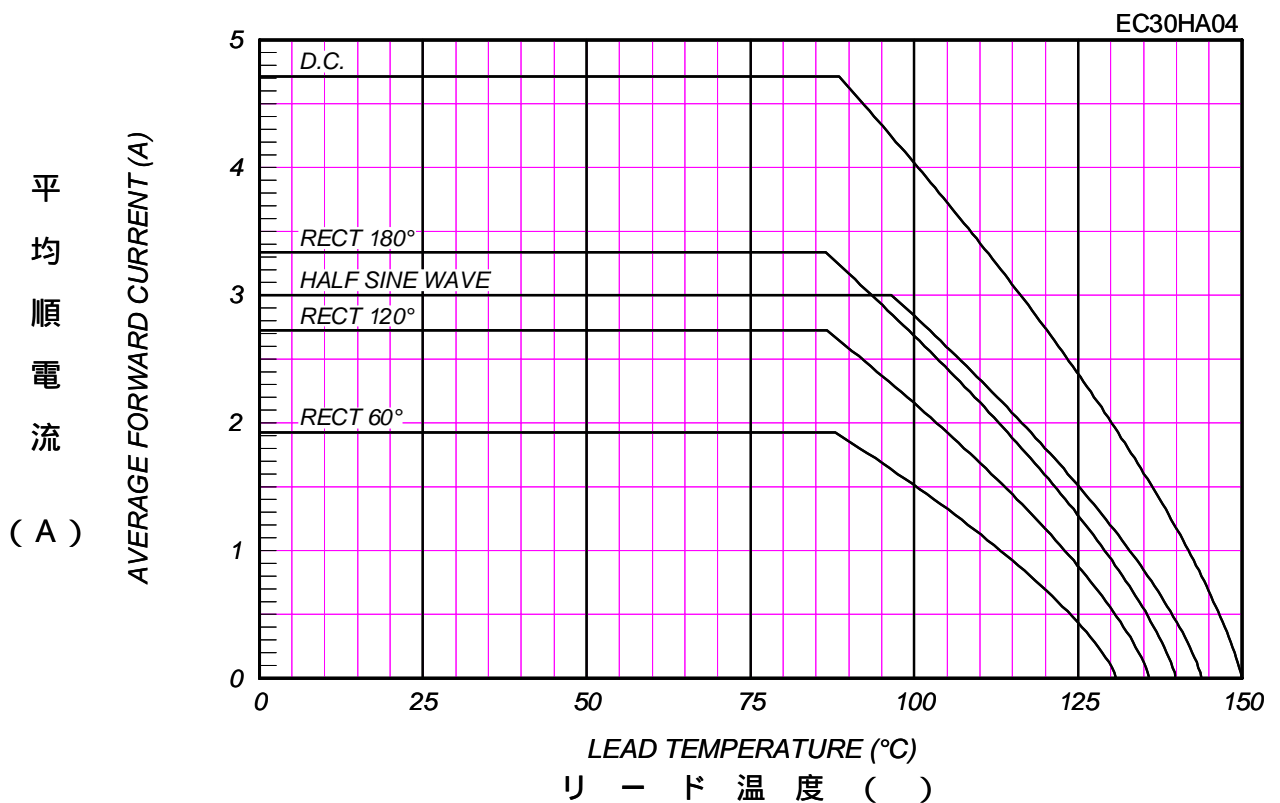
平均順電流 - 周囲温度定格
 AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

Alumina Substrate Mounted (Soldering Land=2x2mm), $V_{RM}=40V$



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

$V_{RM}=40V$



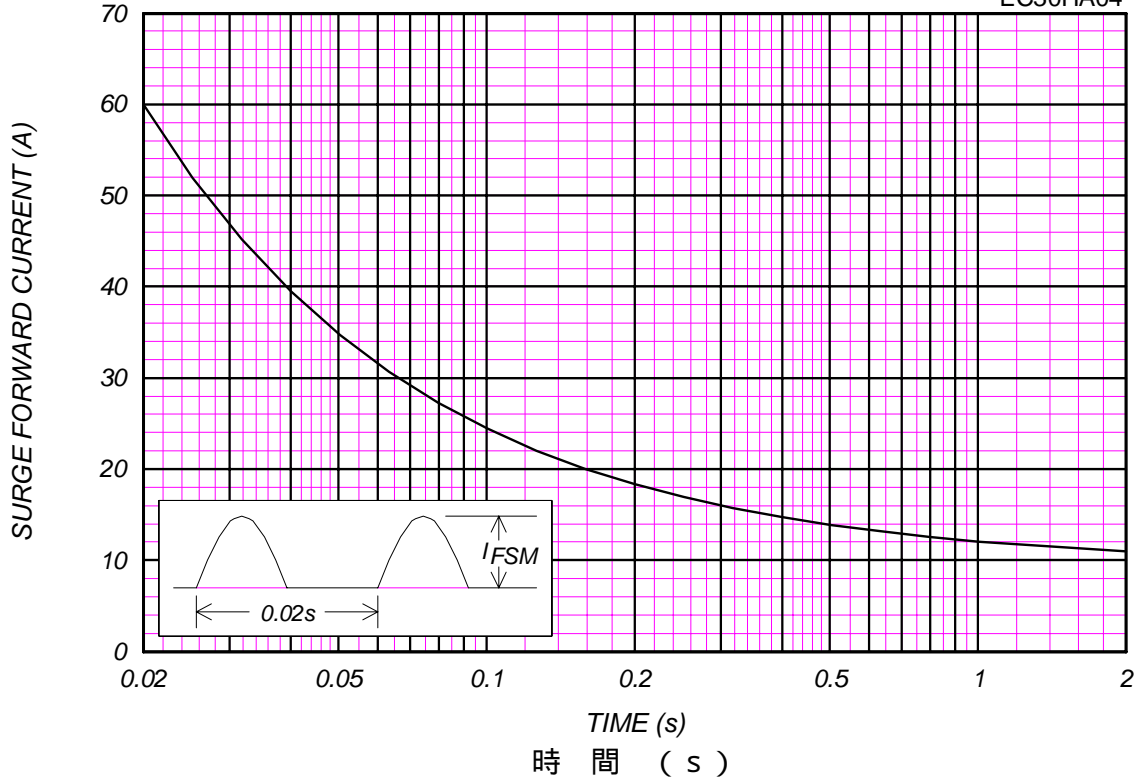
サージ順電流定格 SURGE CURRENT RATINGS

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

EC30HA04

サ
ー
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流

(A)



接合容量特性 JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

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

EC30HA04

接
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(pF)

