

FRD Type : ECU06B60

OUTLINE DRAWING

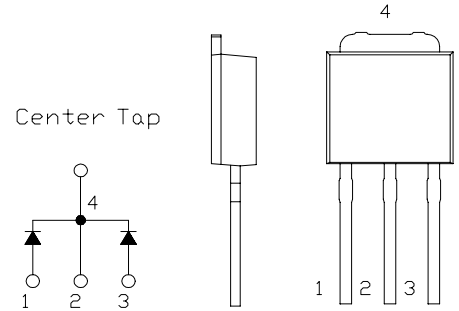
6A 600V 27ns

FEATURES

- * TO-251AA Case
- * Ultra – Fast Recovery
- * Low Power Loss

APPLICATIONS

- For Power Factor Improvement
- High Frequency Rectification



Maximum Ratings

Approx Net Weight:0.35g

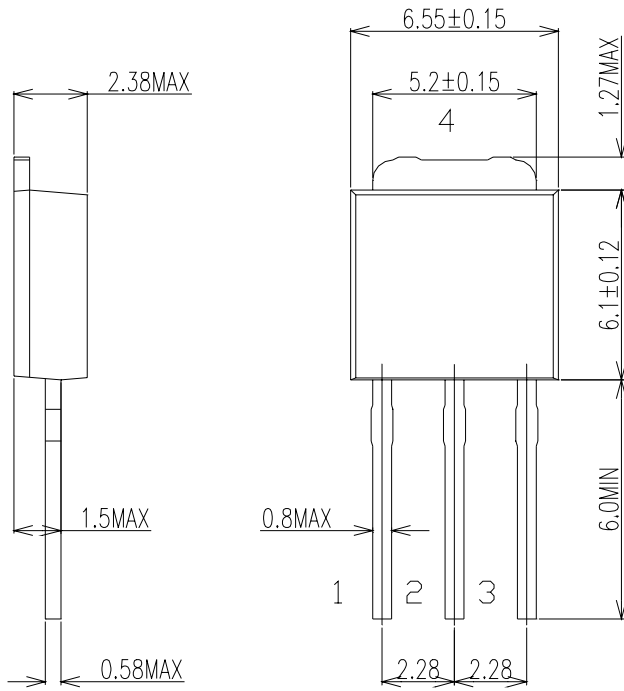
| Rating | | Symbol | ECU06B60 | | | Unit |
|--------------------------------------|----------------------|--------------|---------------|---|------------------------------------|-------------|
| Repetitive Peak Reverse Voltage | | V_{RRM} | 600 | | | V |
| Average Rectified Output Current | P.C.Board mounted *1 | I_O | 1.1 | $T_a=25^{\circ}C$ | 50Hz Full Sine Wave Resistive Load | A |
| | - | | 6.0 | $T_c=77^{\circ}C$ | | |
| RMS Forward Current | | $I_{F(RMS)}$ | 6.66 | | | A |
| Surge Forward Current | | I_{FSM} | 35 | 50Hz Full Sine Wave, 1cycle, Non-repetitive | | A |
| Operating Junction Temperature Range | | T_{jw} | - 40 to + 150 | | | $^{\circ}C$ |
| Storage Temperature Range | | T_{stg} | - 40 to + 150 | | | $^{\circ}C$ |

Electrical • Thermal Characteristics

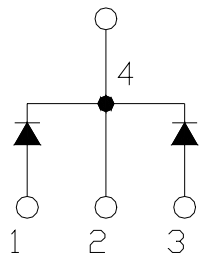
| Characteristics | | Symbol | Conditions | Min | Typ | Max | Unit |
|-----------------------|---------------------|---------------|--|-----|-----|-----|---------------|
| Peak Reverse Current | | I_{RM} | $T_j=25^{\circ}C, V_{RM}=V_{RRM}$ per Arm | - | - | 20 | μA |
| Peak Forward Voltage | | V_{FM} | $T_j=25^{\circ}C, I_{FM}= 3 A$ per Arm | - | 2.2 | 2.7 | V |
| Reverse Recovery Time | | t_{rr} | $I_{FM}= 3 A,$ $-di/dt= 50 A/\mu s, T_a= 25^{\circ}C$ | - | 17 | 27 | ns |
| Thermal Resistance | Junction to Ambient | $R_{th(j-a)}$ | P.C.Board mounted *1 | - | - | 80 | $^{\circ}C/W$ |
| | Junction to Case | $R_{th(j-c)}$ | - | - | - | 5 | $^{\circ}C/W$ |

* Print Land = 20x20 mm

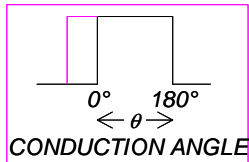
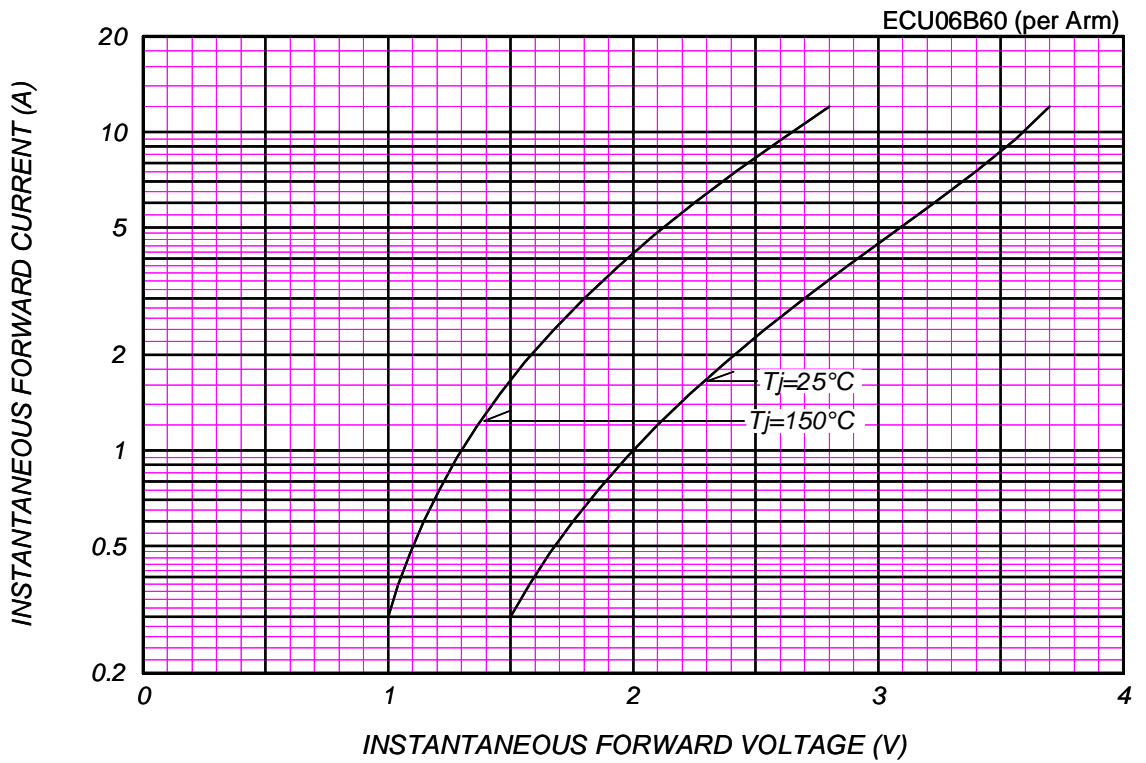
ECU06B60 OUTLINE DRAWING (Dimensions in mm)



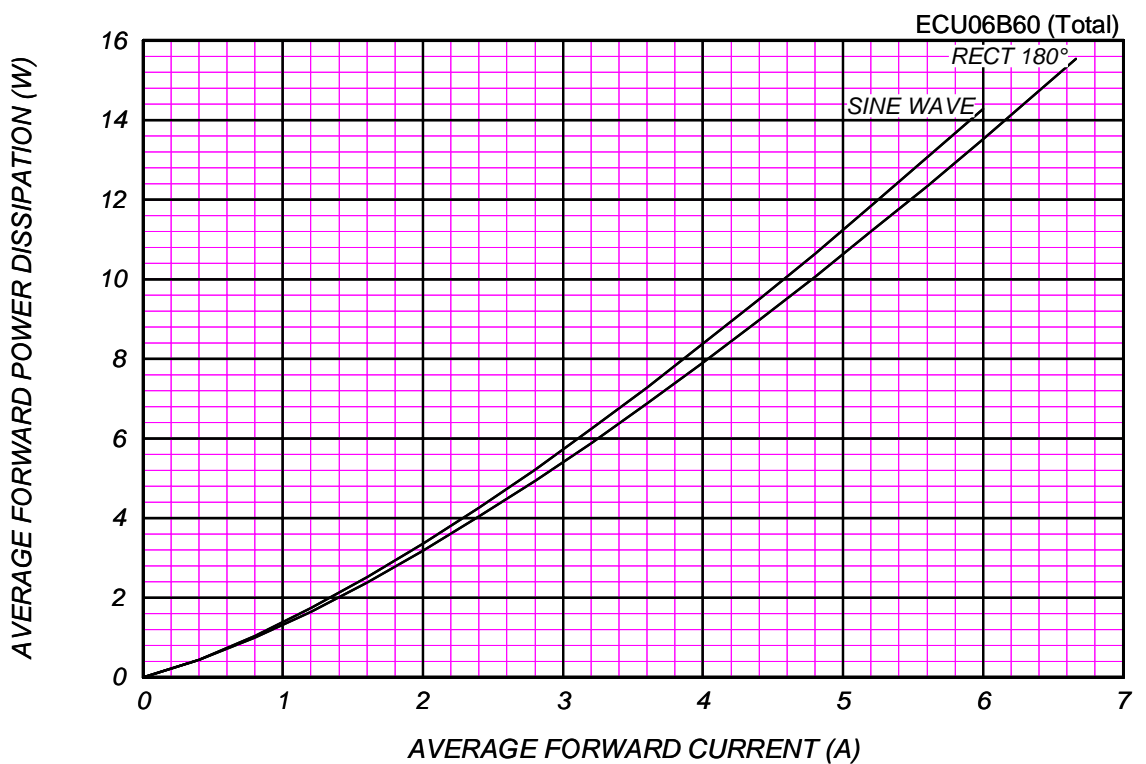
Center Tap



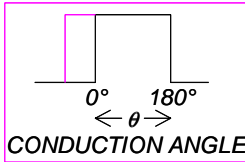
FORWARD CURRENT VS. VOLTAGE



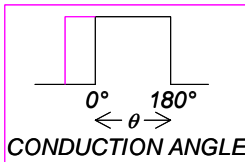
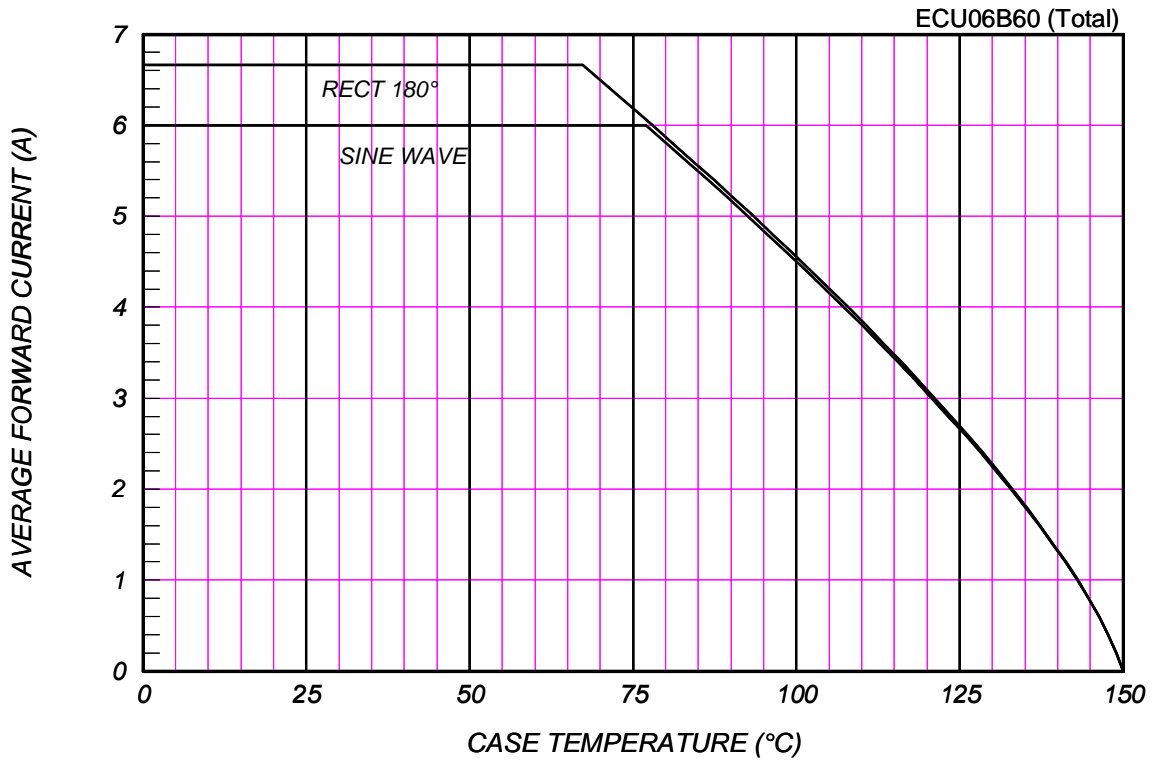
AVERAGE FORWARD POWER DISSIPATION



RECT 180°

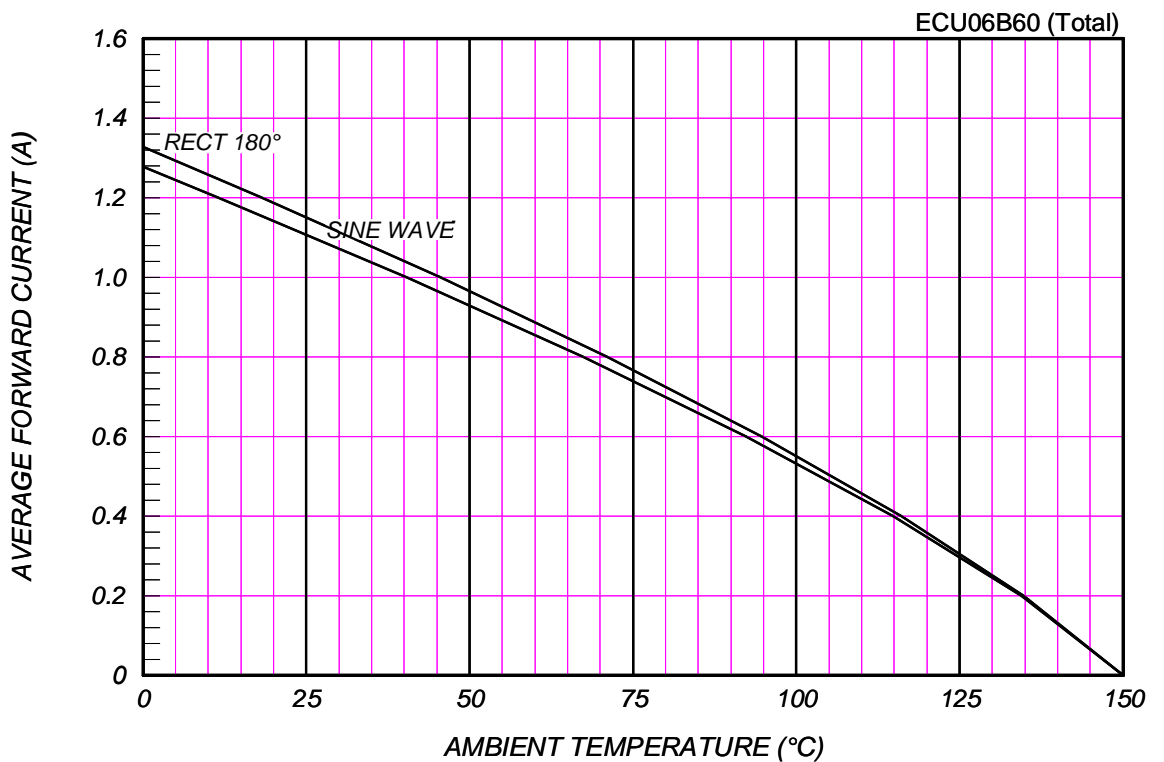


AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE



AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

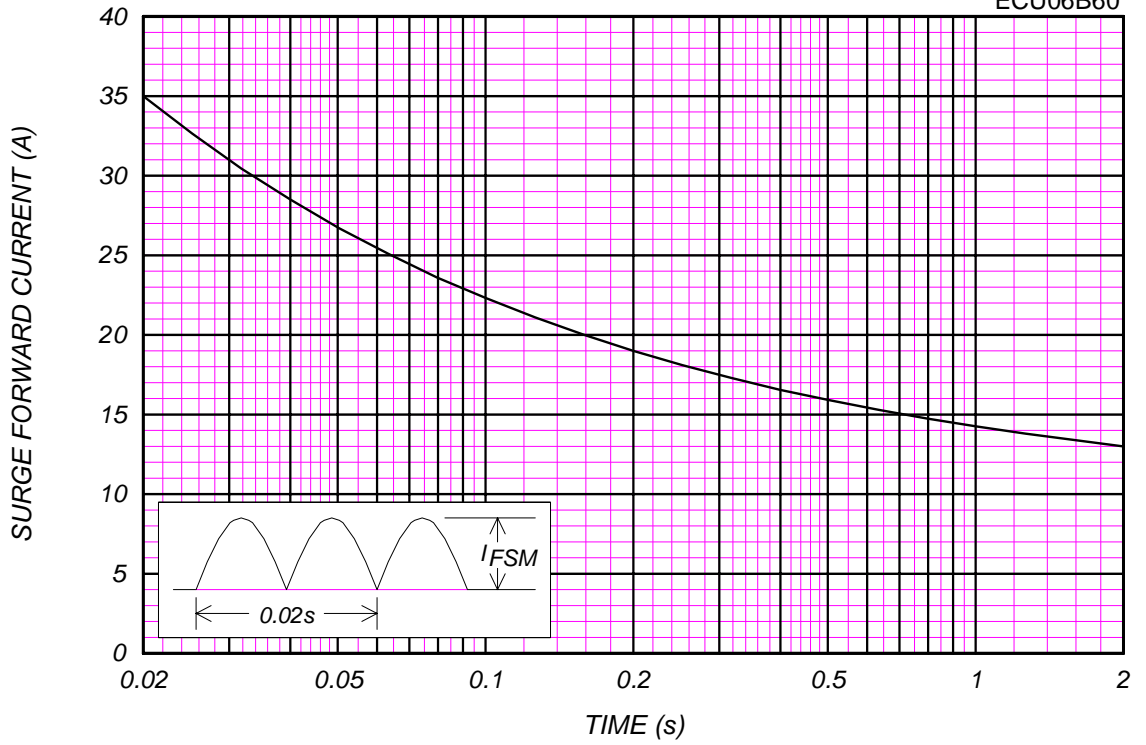
P.C. Board mounted(Print land=20x20mm)



SURGE CURRENT RATINGS

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

ECU06B60



RMS SURGE CURRENT RATINGS

Ta=40°C, Non-Repetitive, No Load

ECU06B60

