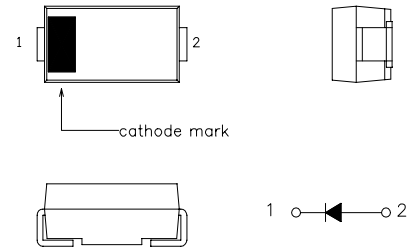


DIODE Type : EC10DS2

FEATURES

- * Miniature Size, Surface Mount Device
- * High Surge Capability
- * Low Forward Voltage Drop
- * Low Reverse Leakage Current
- * Packaged in 12mm Tape and Reel
- * Not Rolling During Assembly

OUTLINE DRAWING



Maximum Ratings

Approx Net Weight:0.06g

| Rating | Symbol | EC10DS2 | | Unit |
|--------------------------------------|--------------|-------------|--|------------------------------------|
| Repetitive Peak Reverse Voltage | V_{RRM} | 200 | | V |
| Non-repetitive Peak Reverse Voltage | V_{RSM} | 400 | | V |
| Average Rectified Output Current | I_O | 0.74 | Ta=25 °C *1 | 50Hz Half Sine Wave Resistive Load |
| | | 1.0 | Ta=25 °C *2 | |
| RMS Forward Current | $I_{F(RMS)}$ | 1.57 | | A |
| Surge Forward Current | I_{FSM} | 25 | 50Hz Half Sine Wave, 1cycle Non-repetitive | A |
| Operating Junction Temperature Range | T_{jw} | -40 to +150 | | °C |
| Storage Temperature Range | T_{stg} | -40 to +150 | | °C |

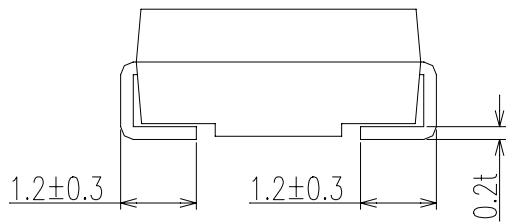
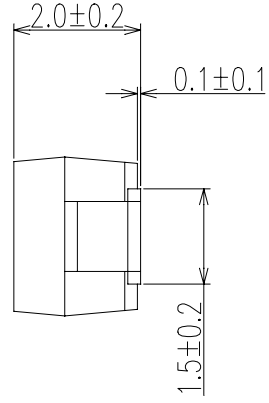
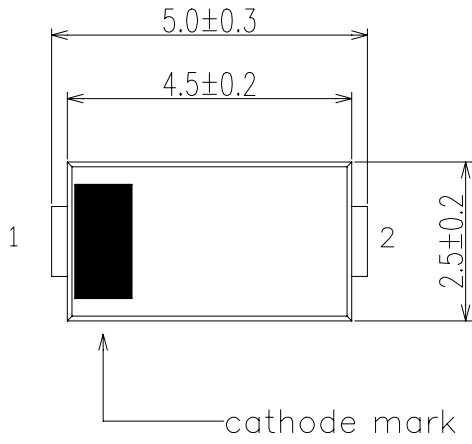
Electrical • Thermal Characteristics

| Characteristics | Symbol | Conditions | Min. | Typ. | Max. | Unit | |
|----------------------|---------------|---|------|------|------|---------------|-------|
| Peak Reverse Current | I_{RM} | $T_j = 25^\circ\text{C}$, $V_{RM} = V_{RRM}$ | - | - | 10 | μA | |
| Peak Forward Voltage | V_{FM} | $T_j = 25^\circ\text{C}$, $I_{FM} = 1.0\text{A}$ | - | - | 1.1 | V | |
| Thermal Resistance | $R_{th(j-a)}$ | Junction to Ambient | *1 | - | - | 157 | °C /W |
| | | | *2 | - | - | 108 | |

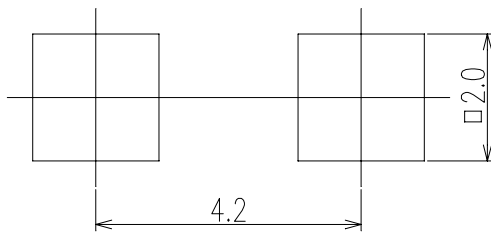
*1 Glass Epoxy Substrate Mounted (Soldering Lands=2x2mm, Both Sides)

*2 Alumina Substrate Mounted (Soldering Lands=2x2mm, Both Sides)

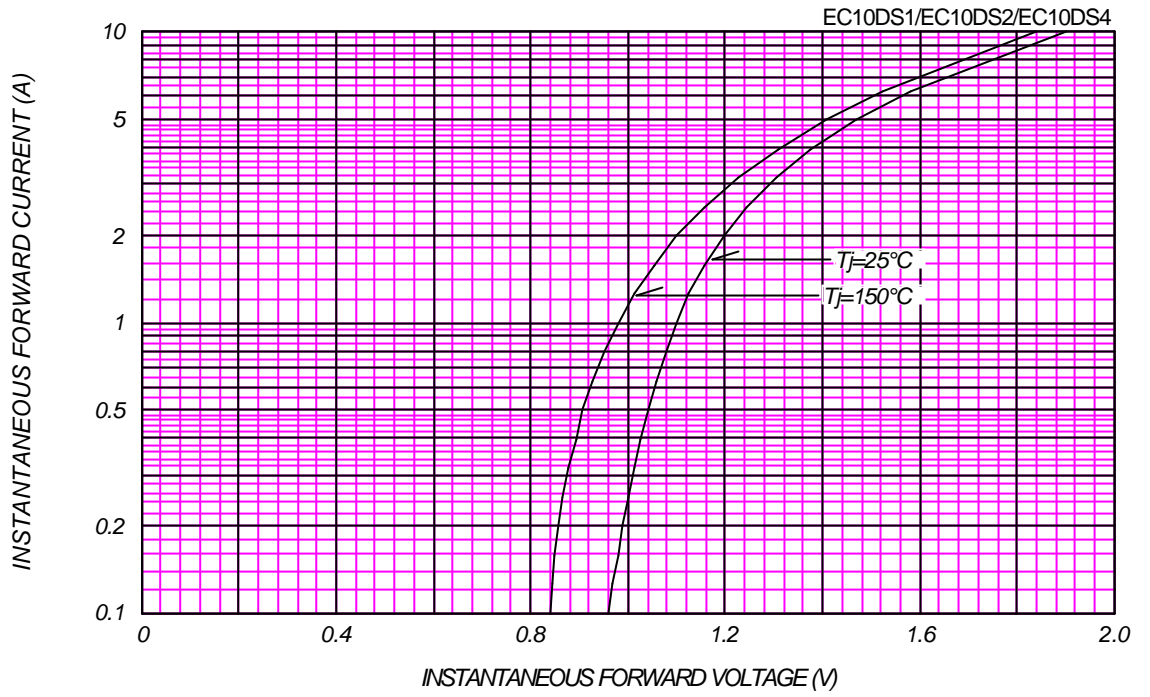
EC10D*_ OUTLINE DRAWING (Dimensions in mm)



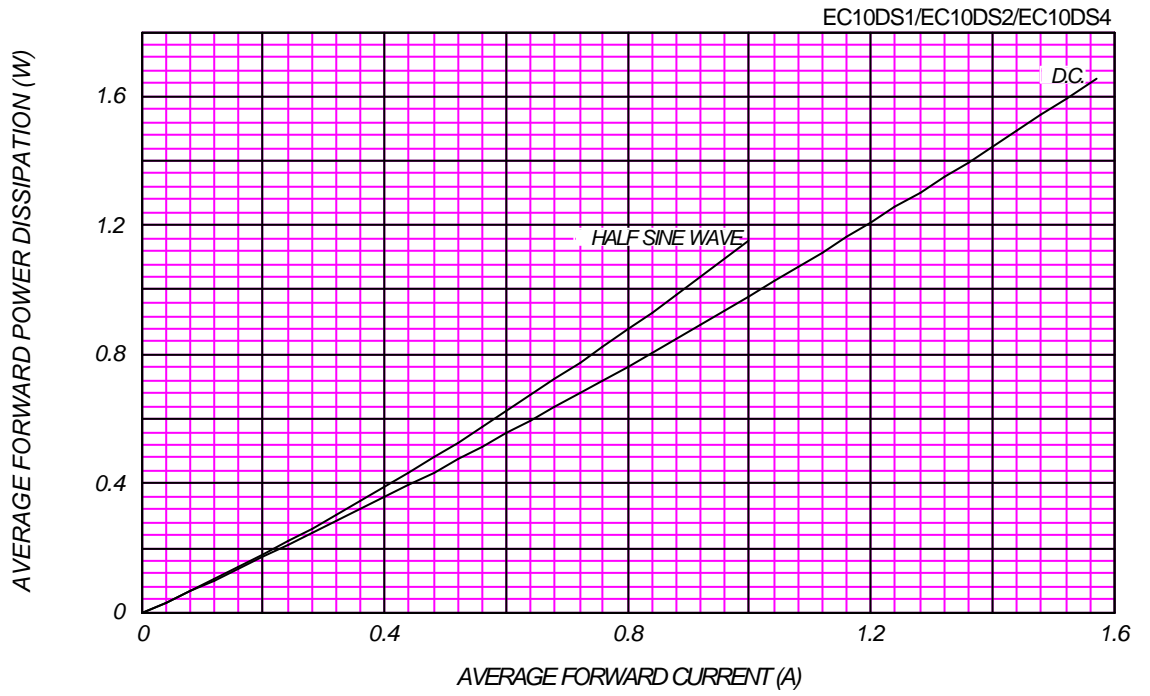
SOLDERING PAD



FORWARD CURRENT VS. VOLTAGE



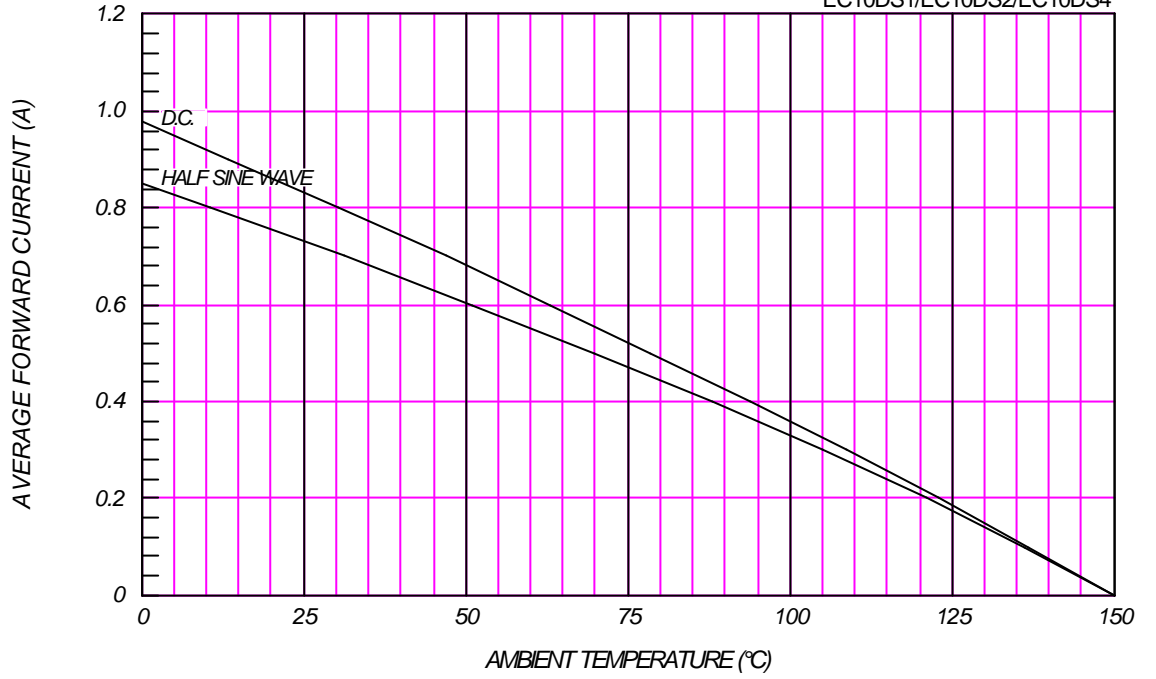
AVERAGE FORWARD POWER DISSIPATION



AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

Glass-Epoxy Substrate Mounted(Soldering Land=2x2mm)

EC10DS1/EC10DS2/EC10DS4



AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

Alumina Substrate Mounted(Soldering Land=2x2mm)

EC10DS1/EC10DS2/EC10DS4



SURGE CURRENT RATINGS

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

EC10DS1/EC10DS2/EC10DS4

