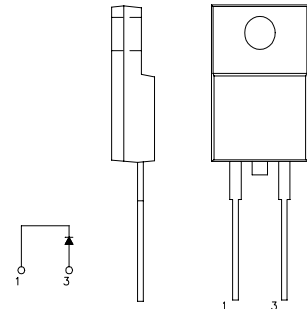


SBD Type : FSH05A03L

OUTLINE DRAWING

FEATURES

- *Similar to TO-220AC Case
- *Fully Molded Isolation
- *Extremely Low Forward Voltage Drop
- *Low Power Loss,High Efficiency
- *High Surge Capability
- *T_j=150 °C operation



Maximum Ratings

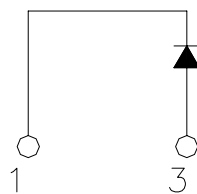
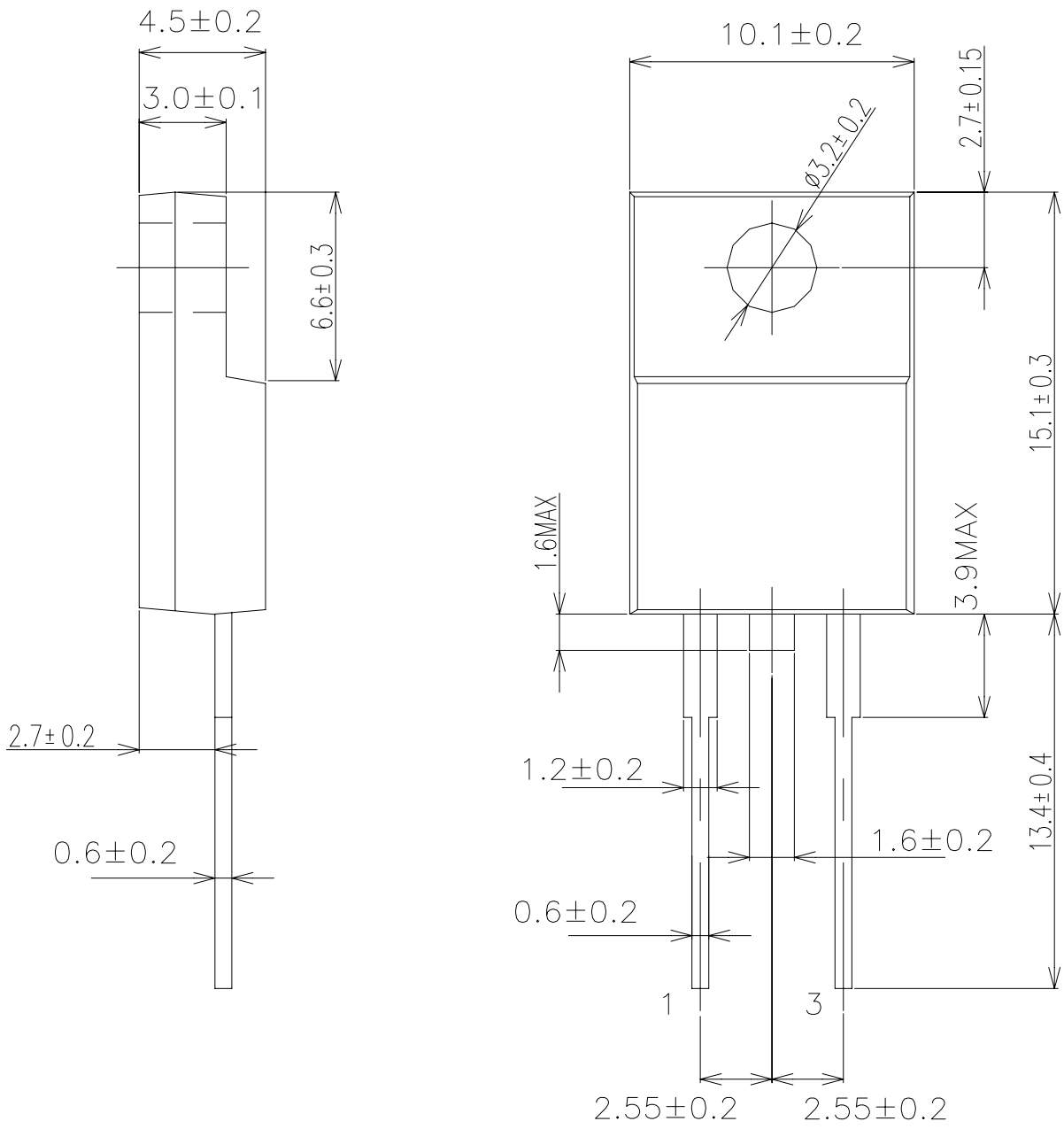
Approx Net Weight: 1.7g

| Rating | Symbol | FSH05A03L | | | Unit |
|---------------------------------------|---------------------|-----------------------------------|--|-------------------------------------|------|
| Repetitive Peak Reverse Voltage | V _{RRM} | 30 | | | V |
| Repetitive Peak Surge Reverse Voltage | V _{RRSM} | 35(pulse width ≤ 1μs duty ≤ 1/50) | | | V |
| Average Rectified Output Current | I _O | 5 | T _c =132°C | 50 Hz half Sine Wave Resistive Load | A |
| RMS Forward Current | I _{F(RMS)} | 7.85 | | | A |
| Surge Forward Current | I _{FSM} | 120 | 50Hz Half Sine Wave ,1cycle Non-repetitive | | A |
| Operating JunctionTemperature Range | T _{jw} | -40 to +150 | | | °C |
| Storage Temperature Range | T _{stg} | -40 to +150 | | | °C |
| Mounting torque | F _{tor} | recommended torque = 0.5 | | | N•m |

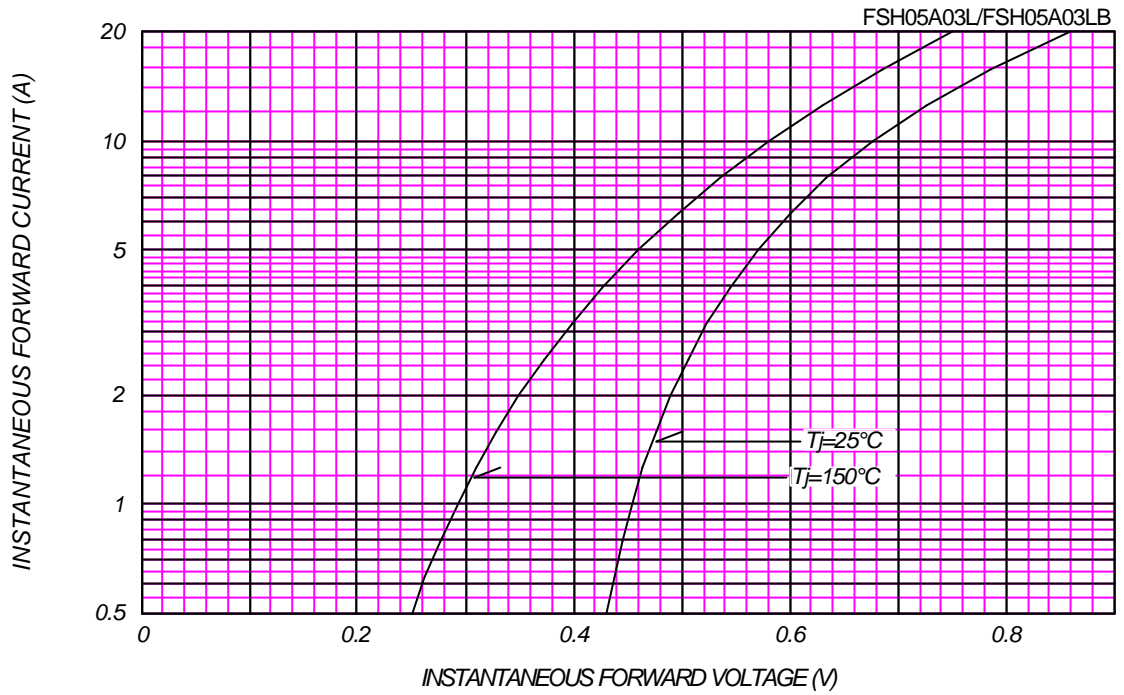
Electrical • Thermal Characteristics

| Characteristics | Symbol | Conditions | Min. | Typ. | Max. | Unit |
|----------------------|----------------------|---|------|------|------|------|
| Peak Reverse Current | I _{RM} | T _j = 25°C, V _{RM} = V _{RRM} | - | - | 1 | mA |
| Peak Forward Voltage | V _{FM} | T _j = 25°C, I _{FM} = 5 A | - | - | 0.57 | V |
| Thermal Resistance | R _{th(j-c)} | Junction to Case | - | - | 5 | °C/W |
| | R _{th(c-f)} | Cace to Fin | - | - | 1.5 | °C/W |

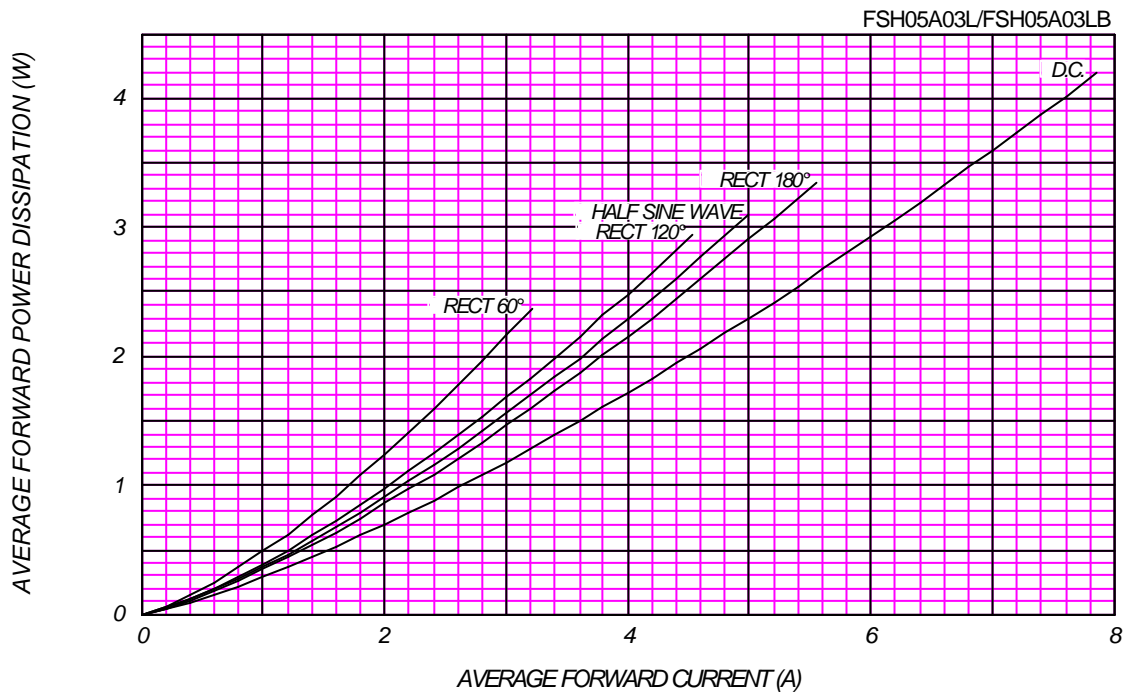
FSH_A_ OUTLINE DRAWING (Dimensions in mm)



FORWARD CURRENT VS. VOLTAGE



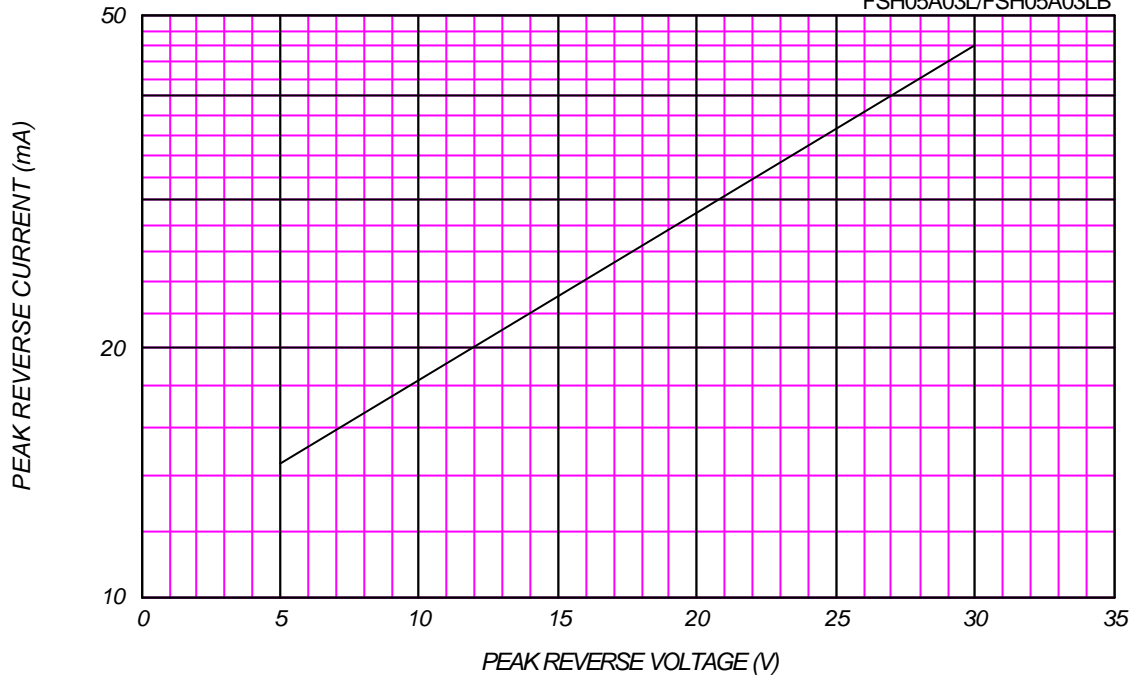
AVERAGE FORWARD POWER DISSIPATION



PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

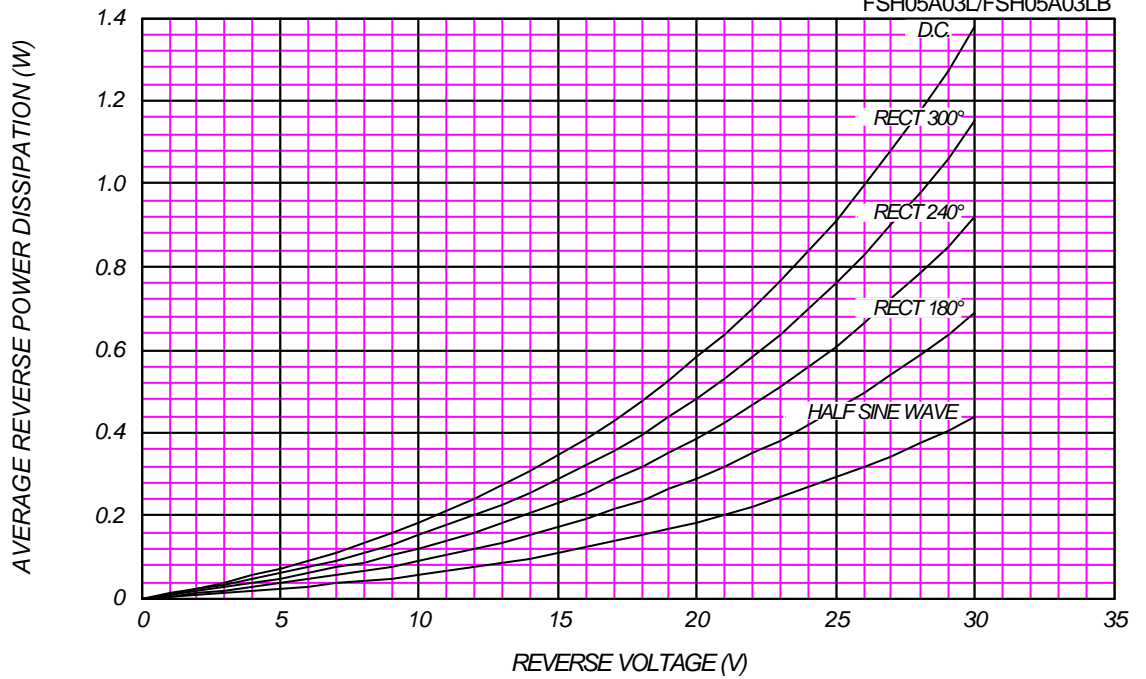
$T_j = 150\text{ }^\circ\text{C}$

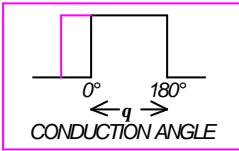
FSH05A03L/FSH05A03LB



AVERAGE REVERSE POWER DISSIPATION

FSH05A03L/FSH05A03LB

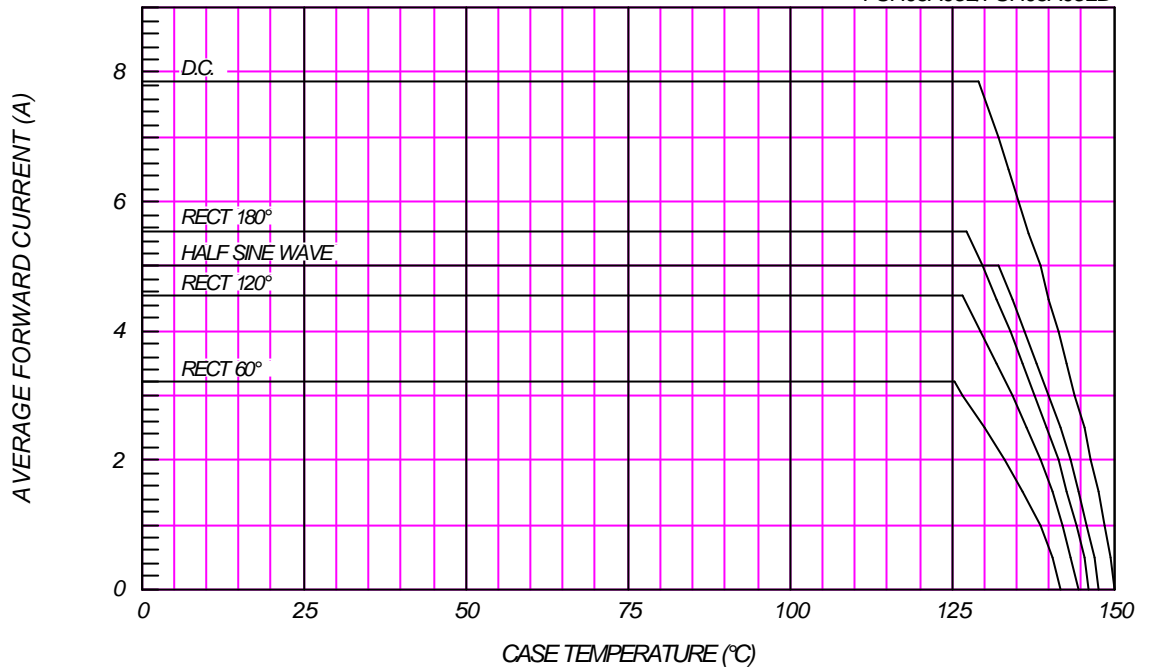




AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM}=30V$

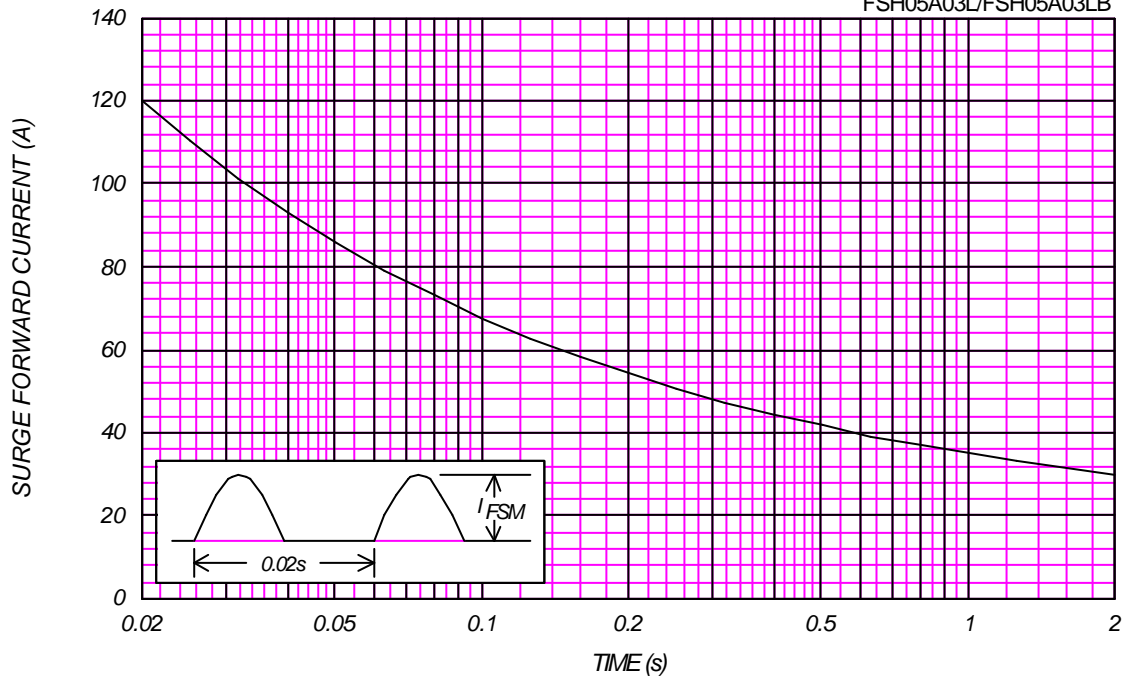
FSH05A03L/FSH05A03LB



SURGE CURRENT RATINGS

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

FSH05A03L/FSH05A03LB



JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

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

FSH05A03L/FSH05A03LB

