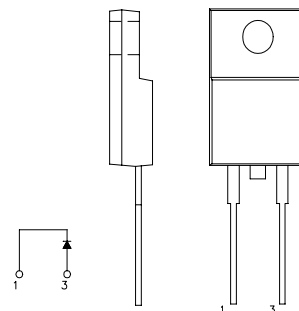


# SBD Type : FSH04A03L

OUTLINE DRAWING

## FEATURES

- \*Similar to TO-220AC Case
- \*Fully Molded Isolation
- \*Extremely Low Forward Voltage Drop
- \*Low Power Loss, High Efficiency
- \*High Surge Capability
- \* $T_j=150\text{ }^\circ\text{C}$  operation



## Maximum Ratings

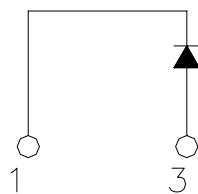
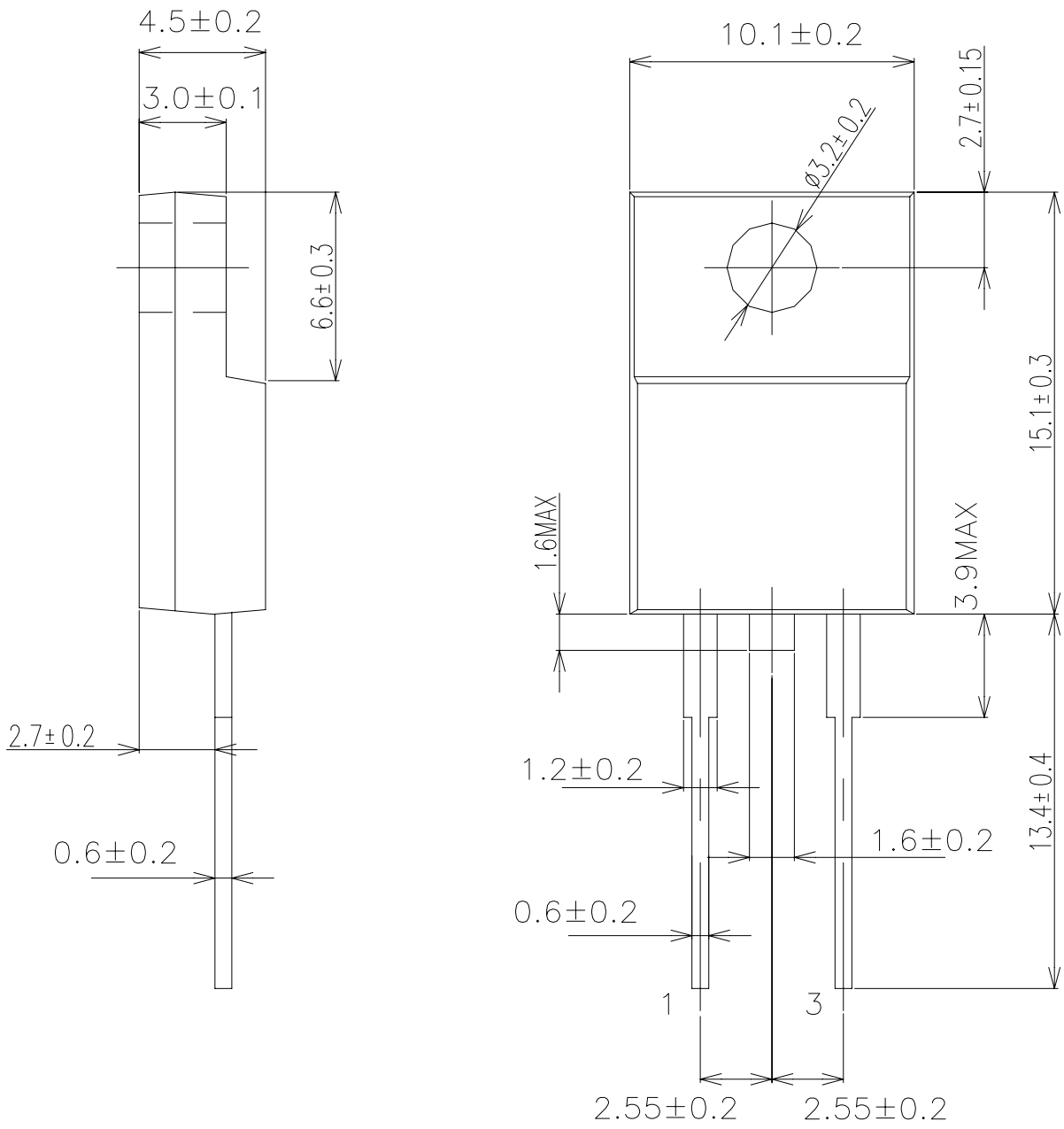
Approx Net Weight: 1.7g

Rating	Symbol	FSH04A03L		Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	30		V
Repetitive Peak Surge Reverse Voltage	$V_{RRSM}$	35(pulse width $\leq 1\mu\text{s}$ duty $\leq 1/50$ )		V
Average Rectified Output Current	$I_O$	4	$T_c=132^\circ\text{C}$ 50 Hz half Sine Wave Resistive Load	A
RMS Forward Current	$I_{F(RMS)}$	6.28		A
Surge Forward Current	$I_{FSM}$	100	50Hz Half Sine Wave ,1cycle Non-repetitive	A
Operating JunctionTemperature Range	$T_{jw}$	-40 to +150		$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-40 to +150		$^\circ\text{C}$
Mounting torque	$F_{tor}$	recommended torque = 0.5		N•m

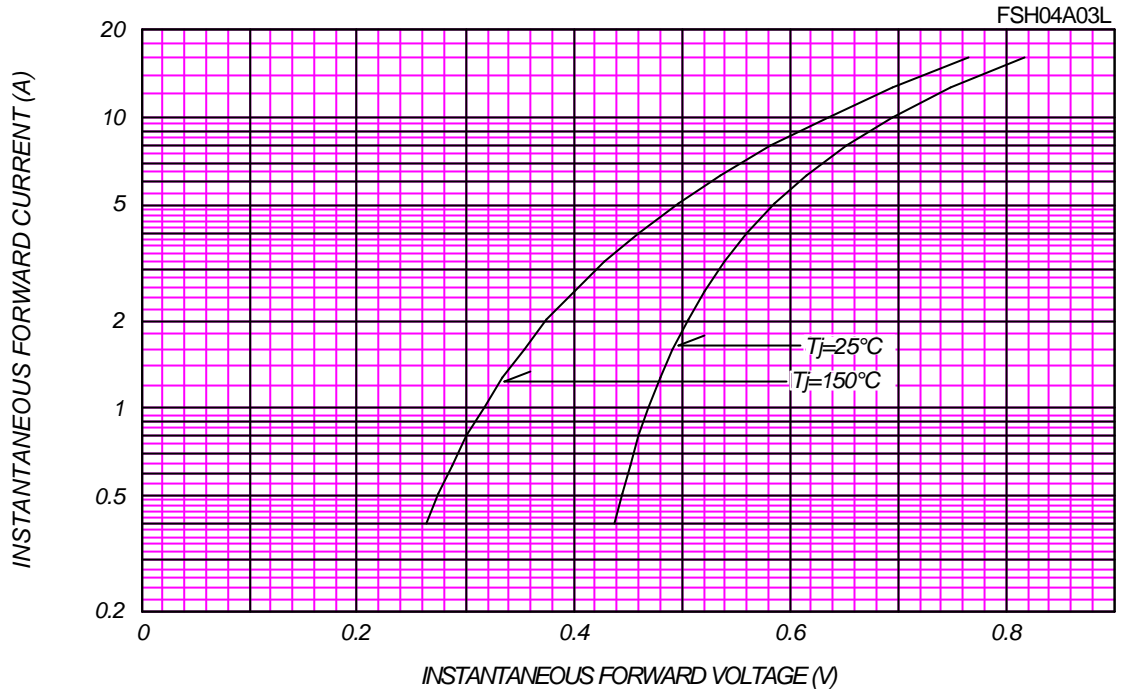
## Electrical • Thermal Characteristics

Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	$I_{RM}$	$T_j= 25^\circ\text{C}$ , $V_{RM}= V_{RRM}$	-	-	1	mA
Peak Forward Voltage	$V_{FM}$	$T_j= 25^\circ\text{C}$ , $I_{FM}= 4\text{ A}$	-	-	0.56	V
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	-	-	6	$^\circ\text{C}/\text{W}$
	$R_{th(c-f)}$	Case to Fin	-	-	1.5	$^\circ\text{C}/\text{W}$

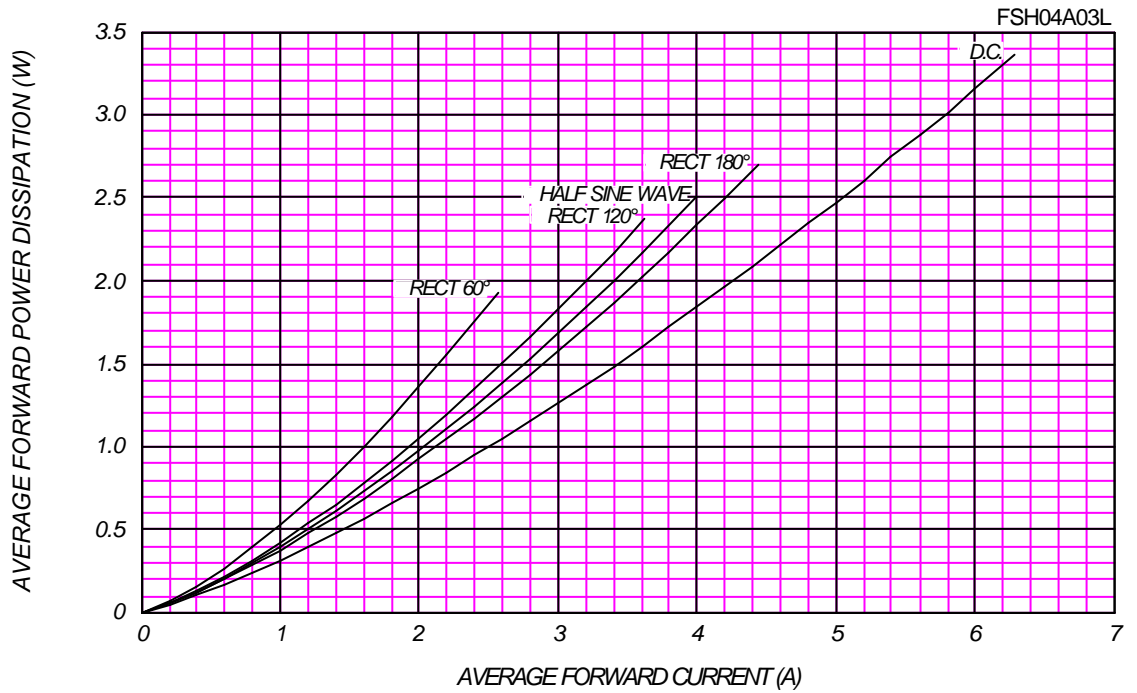
FSH\_A\_ OUTLINE DRAWING (Dimensions in mm)



FORWARD CURRENT VS. VOLTAGE



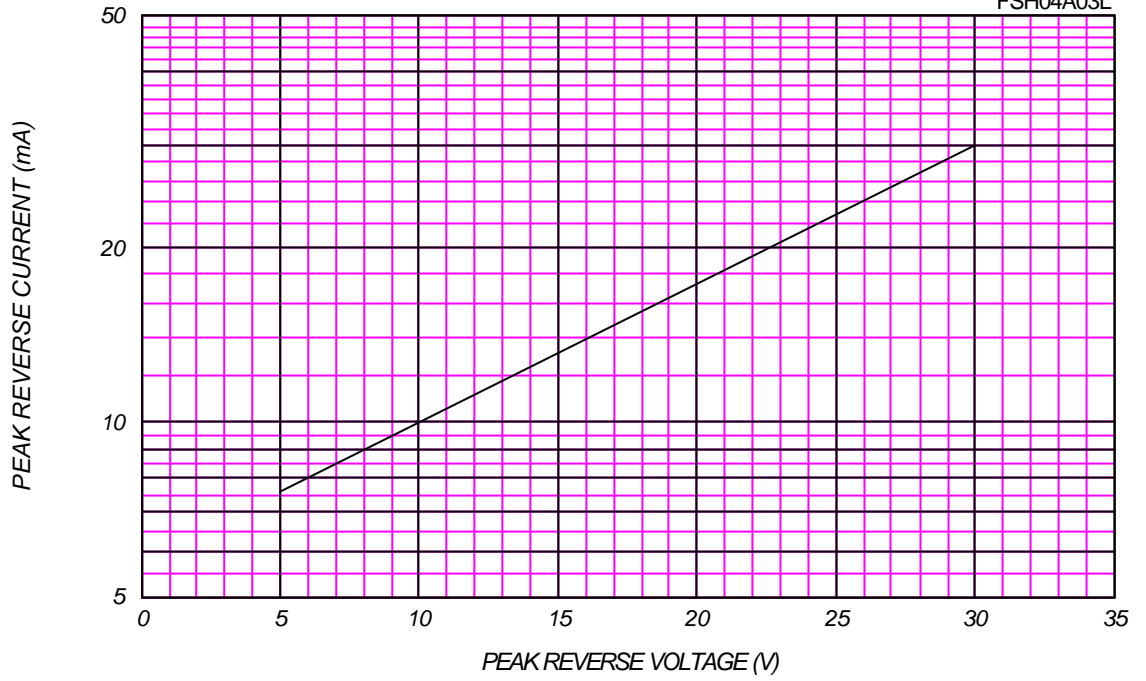
AVERAGE FORWARD POWER DISSIPATION



PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

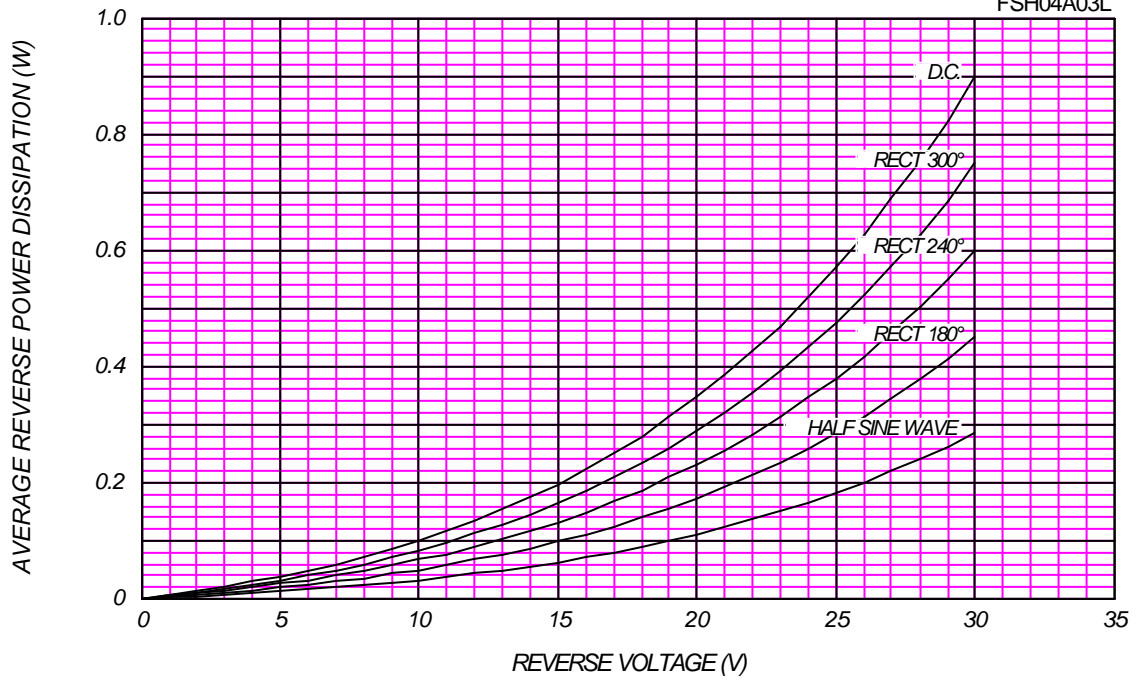
$T_j = 150\text{ }^\circ\text{C}$

FSH04A03L



AVERAGE REVERSE POWER DISSIPATION

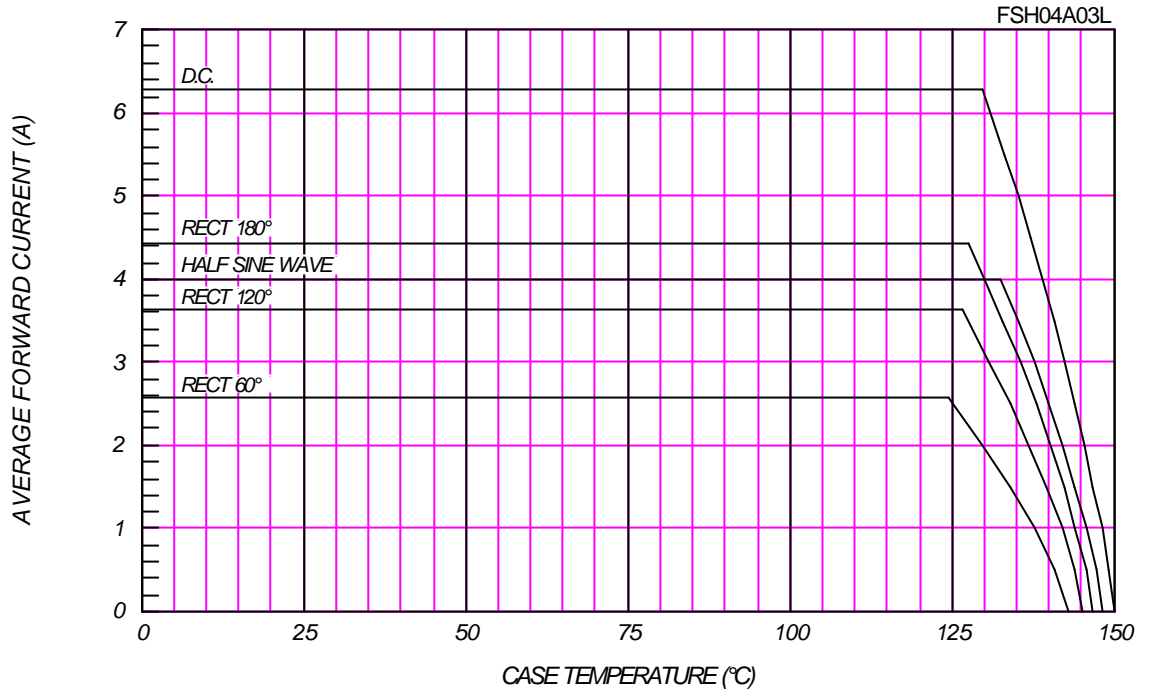
FSH04A03L





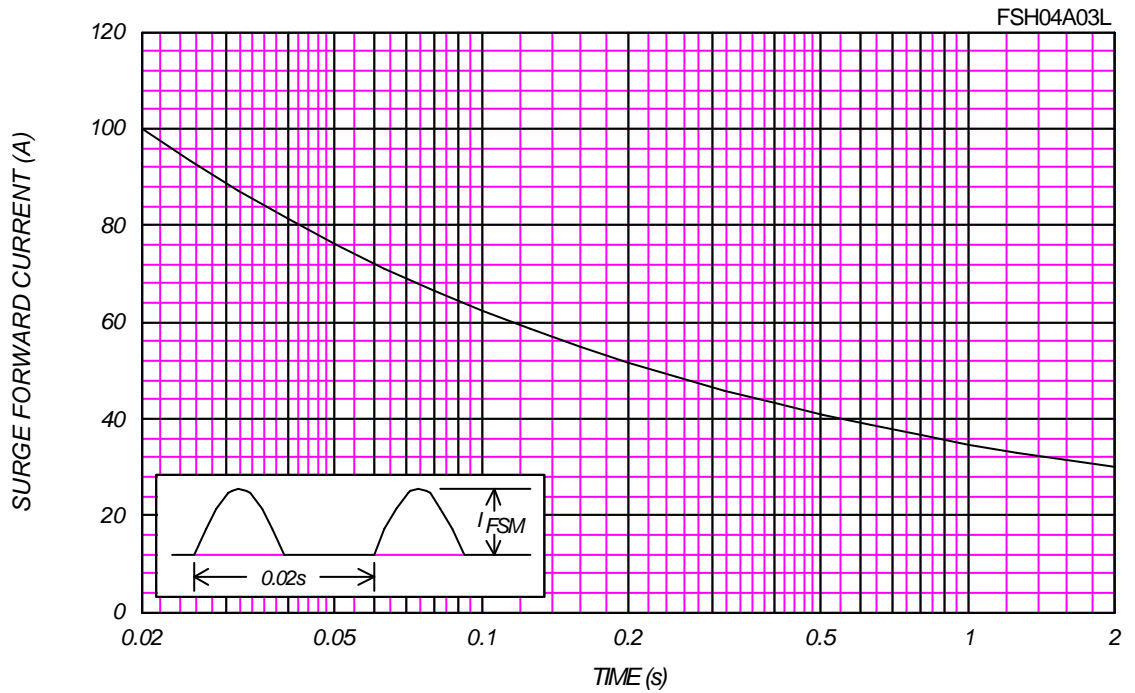
### AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM}=30V$



### SURGE CURRENT RATINGS

$f=50\text{Hz}$ , Sine Wave, Non-Repetitive, No Load



JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

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

FSH04A03L

