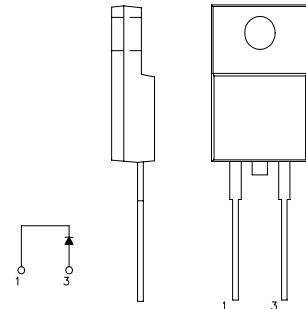


SBD Type : FSH10A03L

OUTLINE DRAWING

FEATURES

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



Maximum Ratings

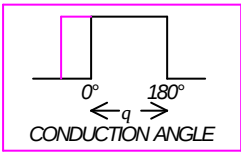
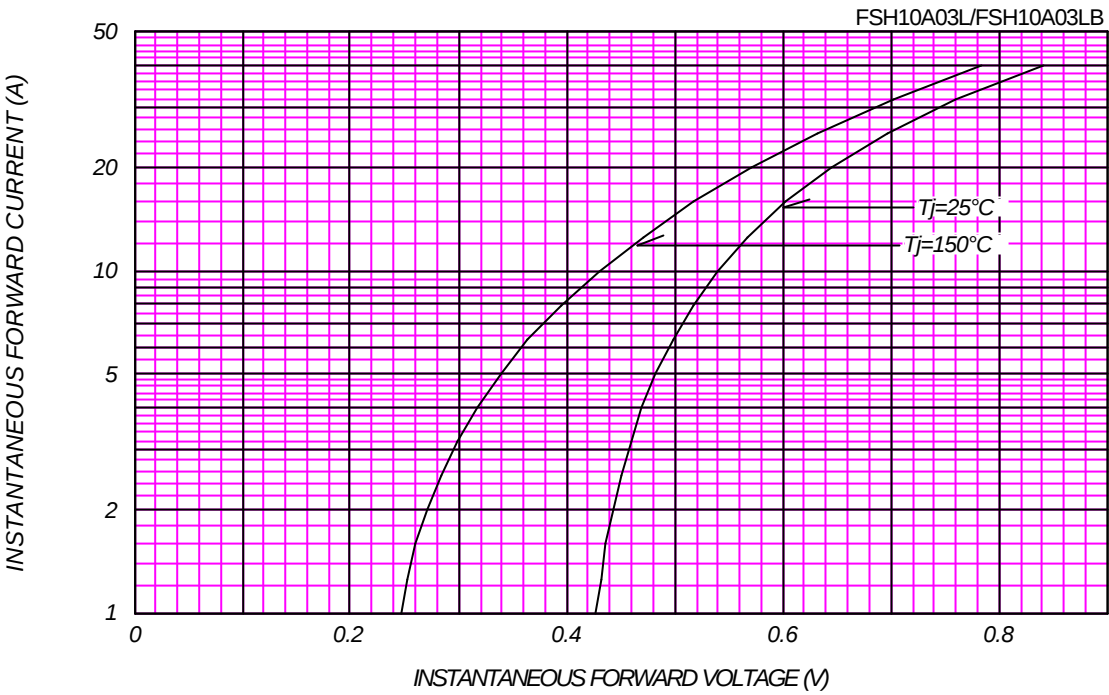
Approx Net Weight: 1.7g

Rating	Symbol	FSH10A03L			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	10	Tc=128℃	50 Hz half Sine Wave Resistive Load	A
RMS Forward Current	I _{F(RMS)}	15.7			A
Surge Forward Current	I _{FSM}	180	50Hz Half Sine Wave ,1cycle Non-repetitive		A
Operating JunctionTemperature Range	T _{jw}	-40 to +150			℃
Storage Temperature Range	T _{stg}	-40 to +150			℃
Mounting torque	F _{tor}	recommended torque = 0.5			N•m

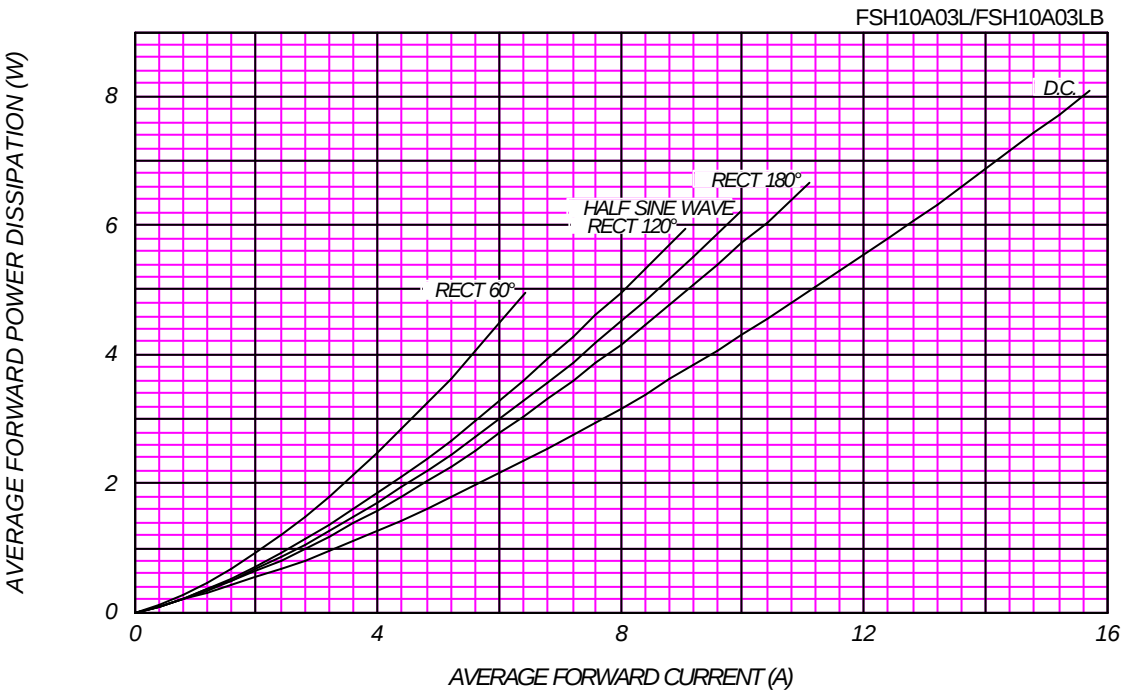
Electrical • Thermal Characteristics

Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	I_{RM}	$T_j= 25^\circ C, V_{RM}= V_{RRM}$	-	-	1	mA
Peak Forward Voltage	V_{FM}	$T_j= 25^\circ C, I_{FM}= 10 A$	-	-	0.54	V
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	-	-	3	$^\circ C /W$
	$R_{th(c-f)}$	Cace to Fin	-	-	1.5	$^\circ C /W$

FORWARD CURRENT VS. VOLTAGE



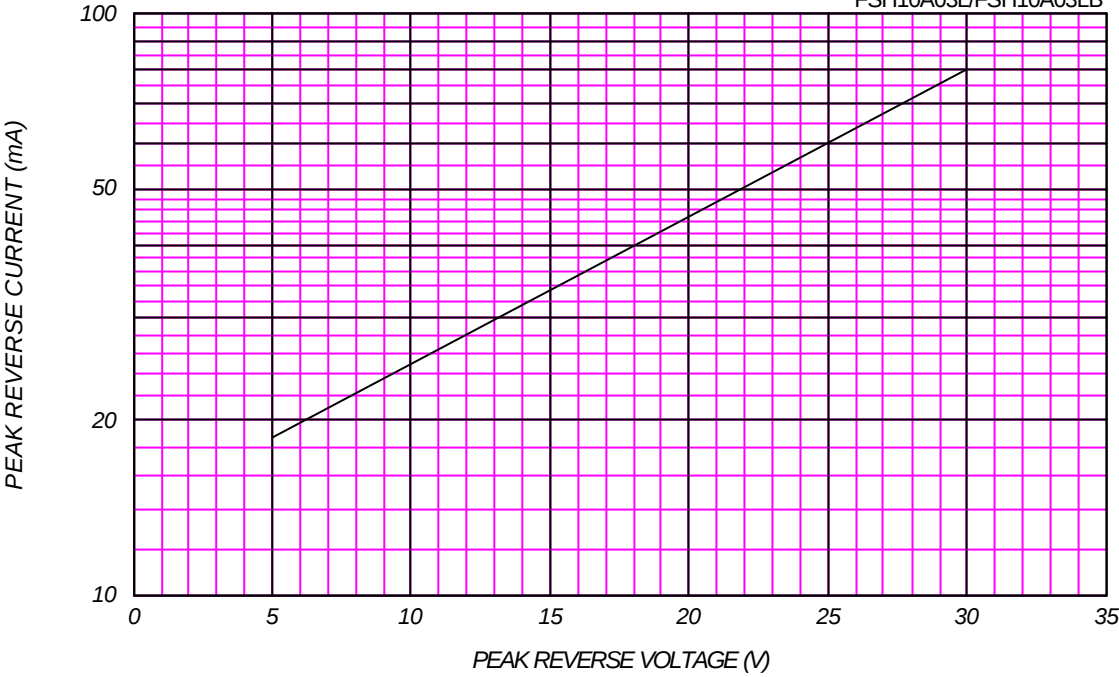
AVERAGE FORWARD POWER DISSIPATION



PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

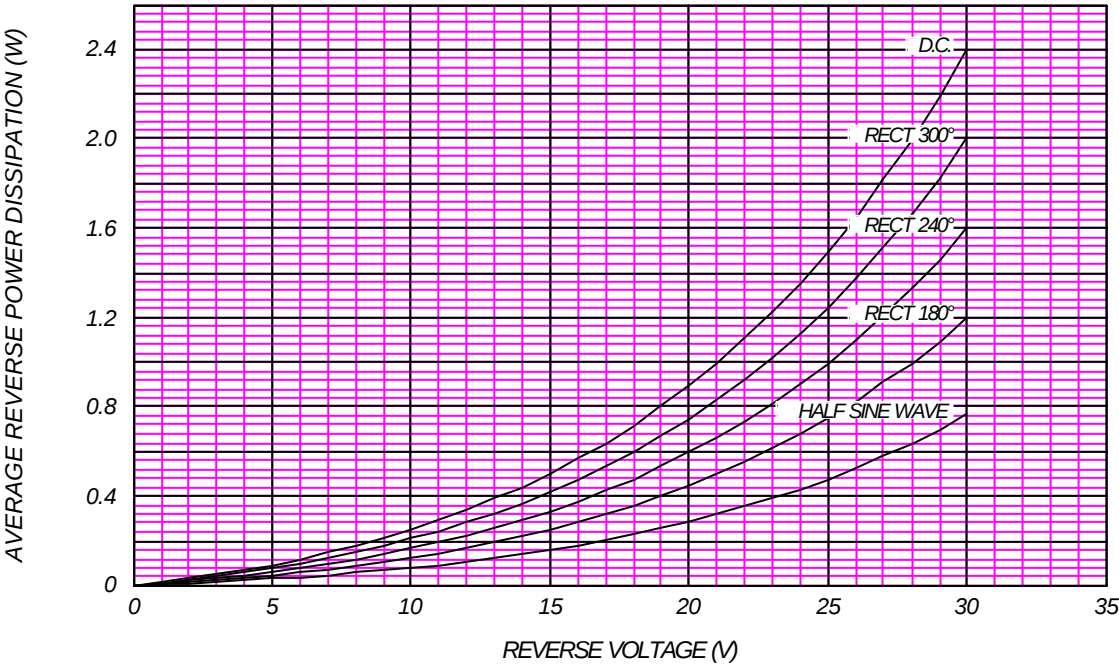
T_j = 150 °C

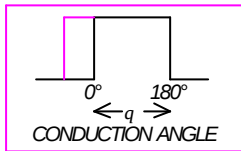
FSH10A03L/FSH10A03LB



AVERAGE REVERSE POWER DISSIPATION

FSH10A03L/FSH10A03LB

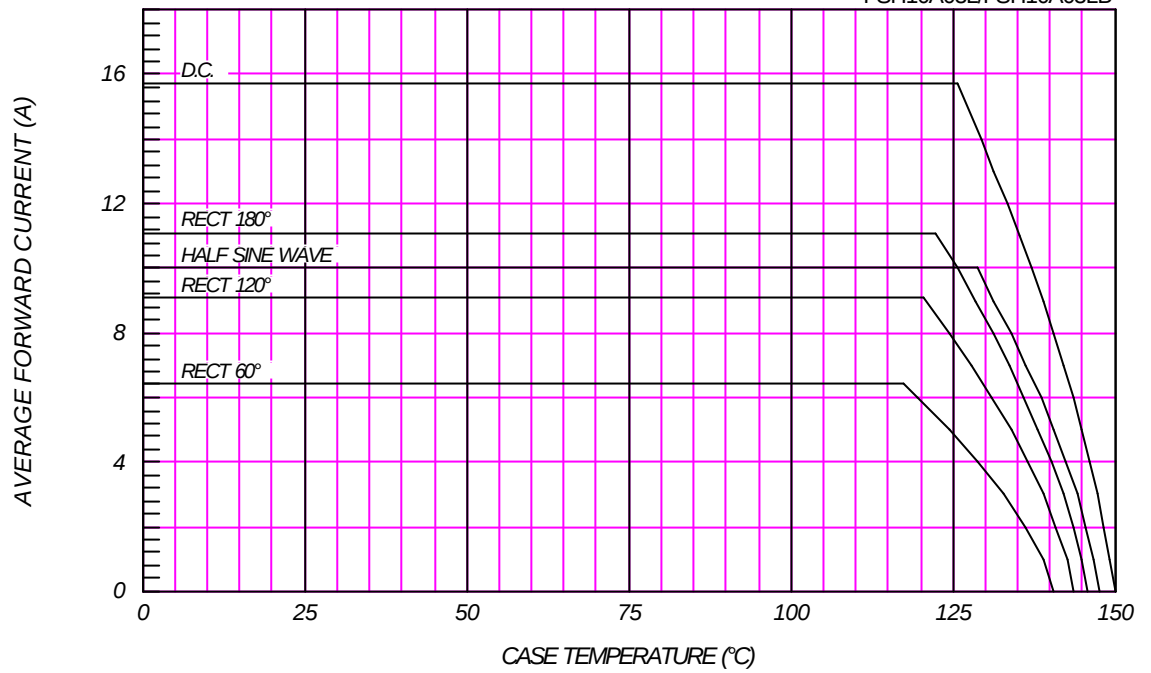




AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM}=30V$

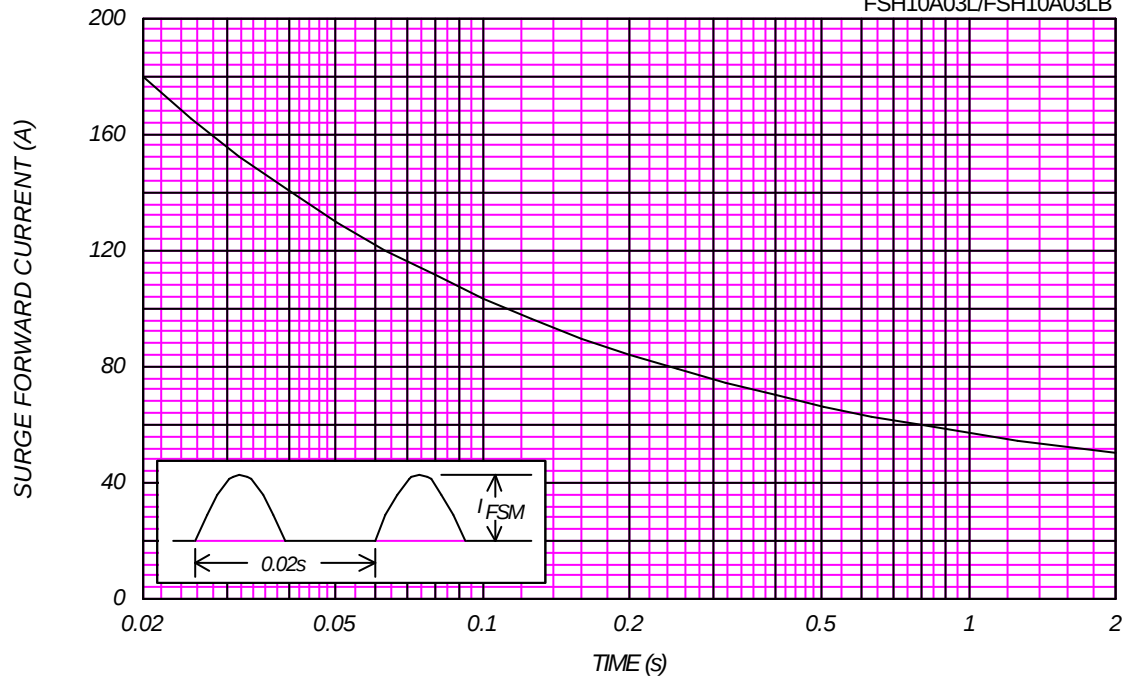
FSH10A03L/FSH10A03LB



SURGE CURRENT RATINGS

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

FSH10A03L/FSH10A03LB



JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

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

FSH10A03L/FSH10A03LB

