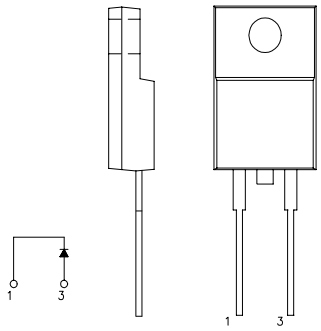
Nihon Inter Electronics Corporation

SBD Type : FSH10A04

OULINE DRAWING



FEATURES

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

Maximum Ratings

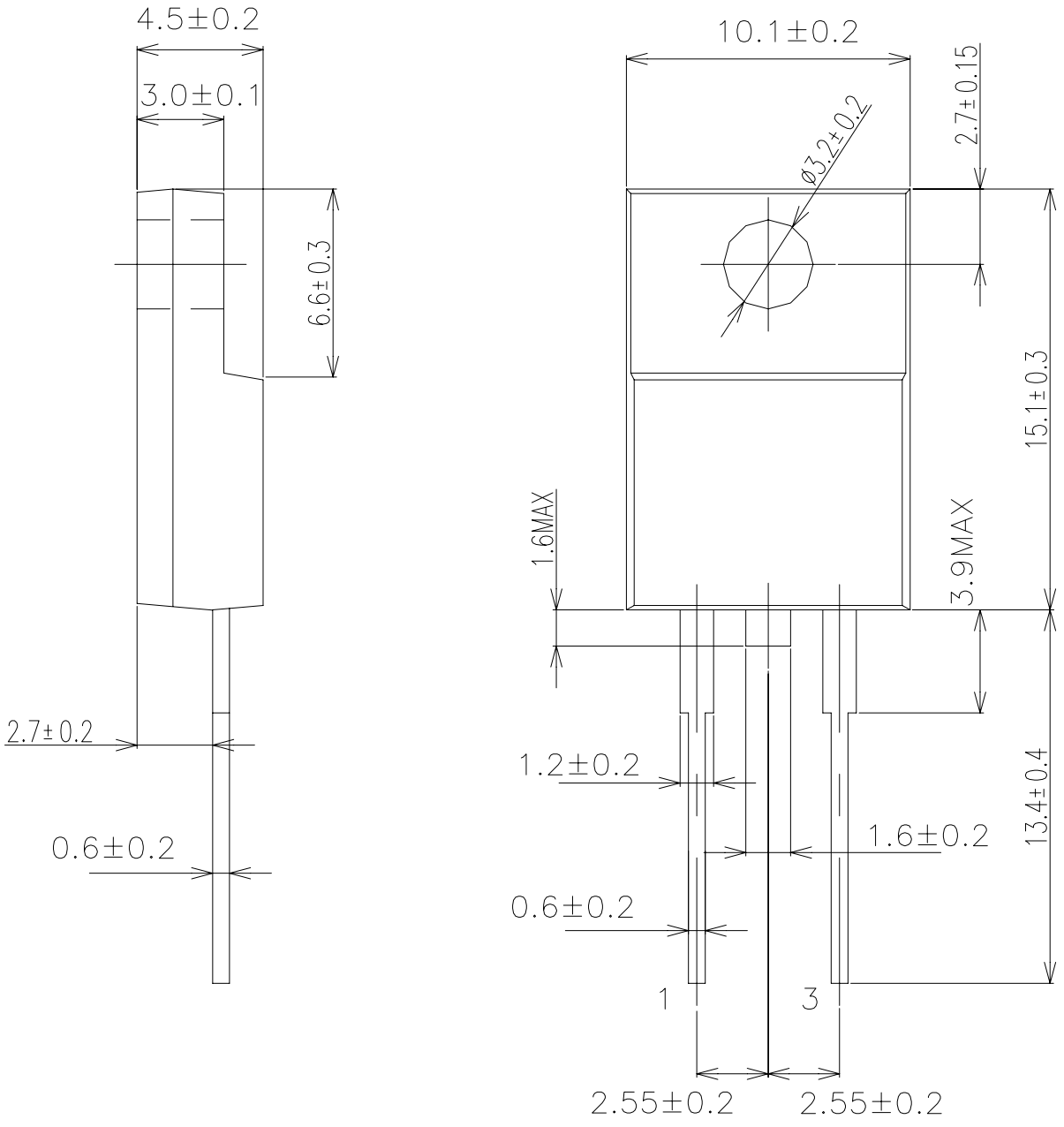
Approx Net Weight: 1.7g

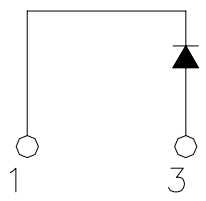
Rating	Symbol	FSH10A04			Unit
Repetitive Peak Reverse Voltage	V_{RRM}	40			V
Repetitive Peak Surge Reverse Voltage	V_{RRSM}	45(pulse width ≤ 1μs duty ≤ 1/50)			V
Average Rectified Output Current	I_O	10	Tc=127℃	50 Hz half Sine Wave Resistive Load	A
RMS Forward Current	$I_{F(RMS)}$	15.7			A
Surge Forward 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	Ftor	recommended torque = 0.5			N•m

Electrical • Thermal Characteristics

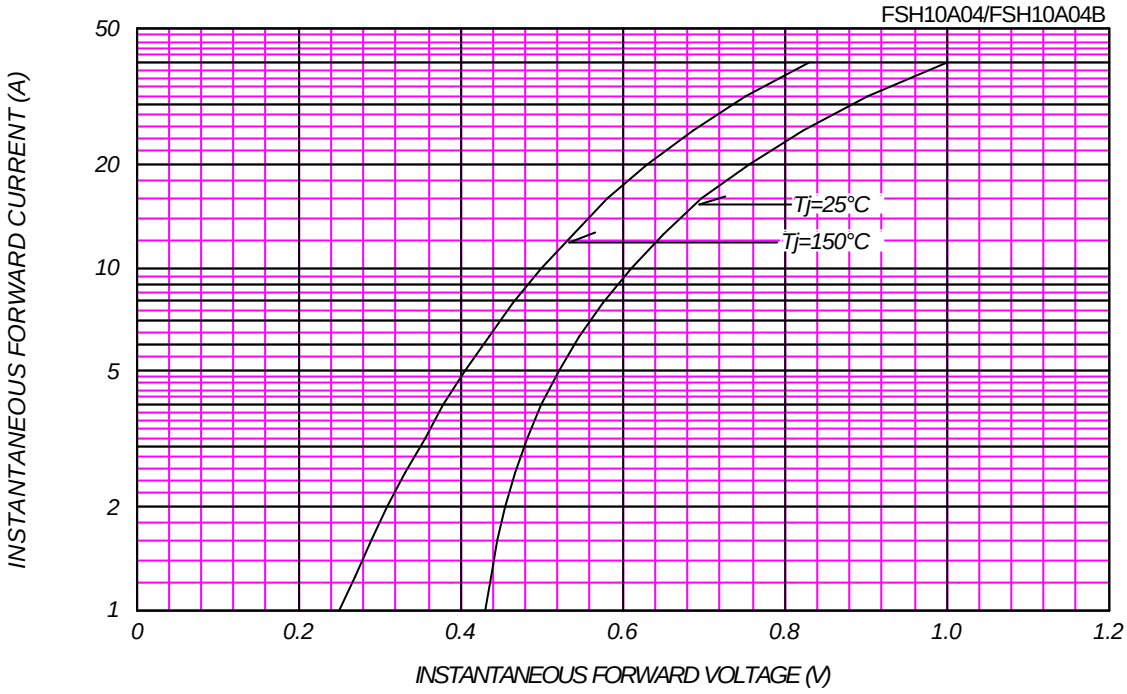
Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	I_{RM}	Tj= 25℃, V_{RM}= V_{RRM}	-	-	1	mA
Peak Forward Voltage	V_{FM}	Tj= 25℃, I_{FM}= 10 A	-	-	0.61	V
Thermal Resistance	Rth(j-c)	Junction to Case	-	-	3	℃ /W
	Rth(c-f)	Cace to Fin	-	-	1.5	℃ /W

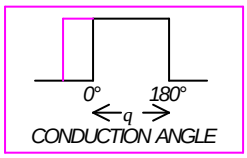
FSH_A_ OUTLINE DRAWING (Dimensions in mm)



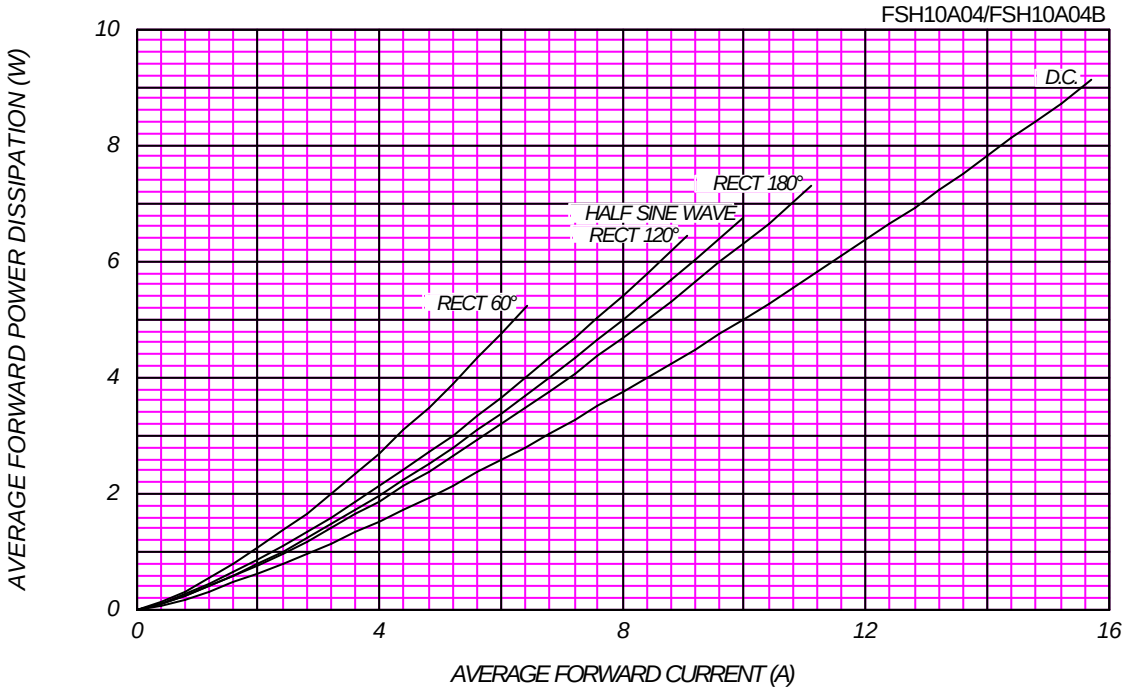


FORWARD CURRENT VS. VOLTAGE





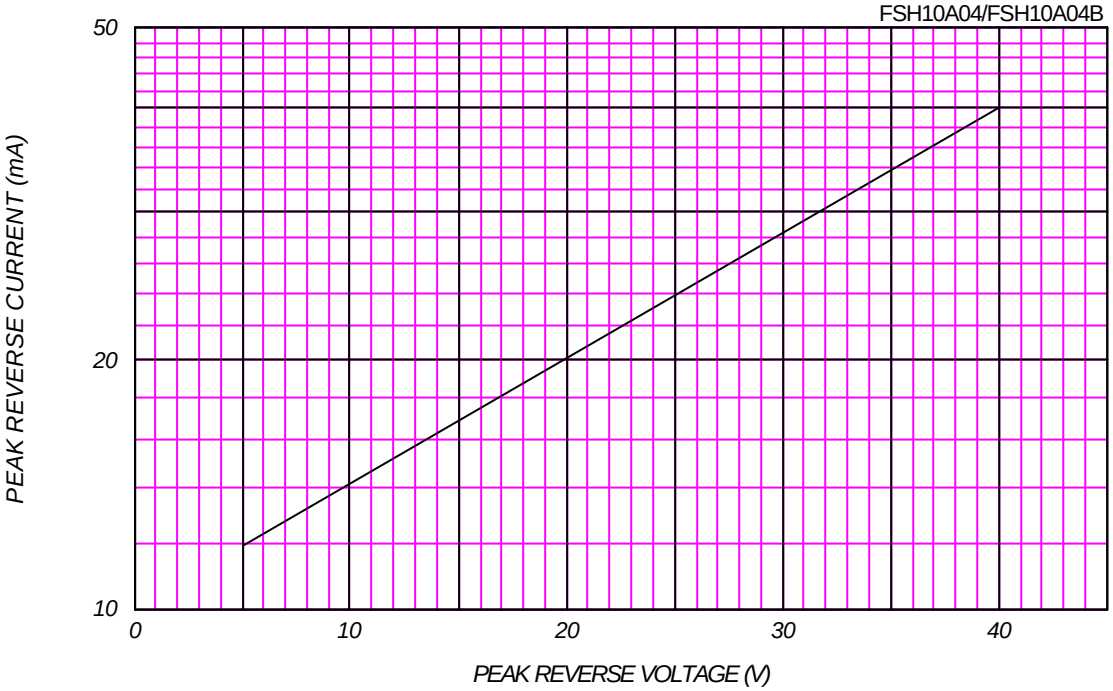
AVERAGE FORWARD POWER DISSIPATION



PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

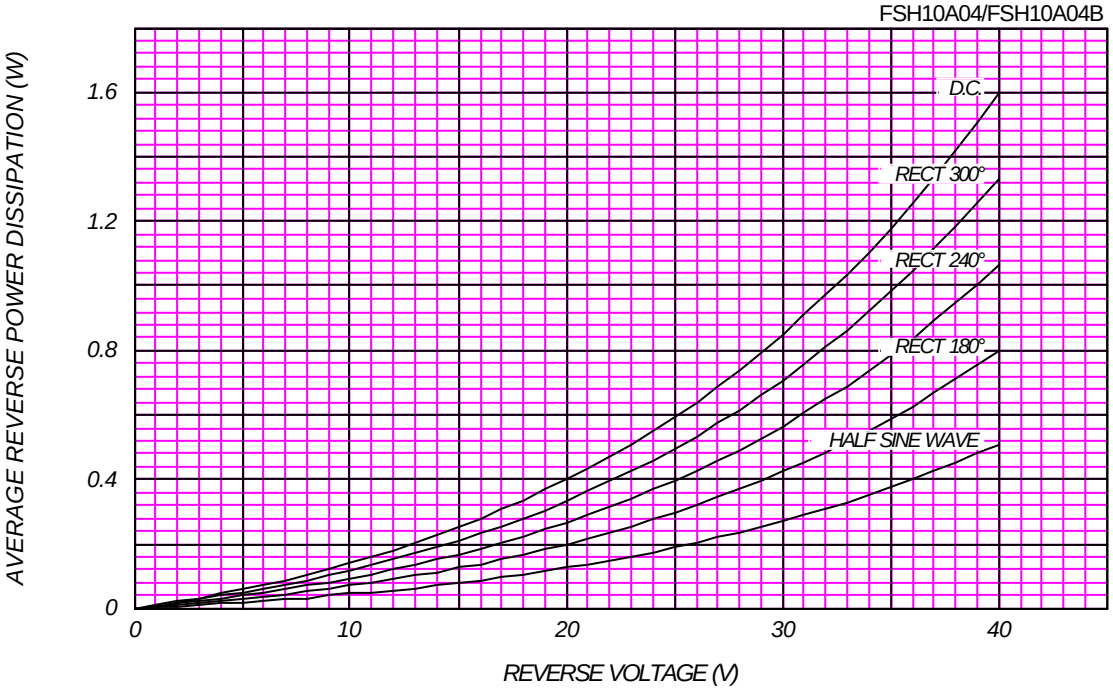
Tj= 150 °C

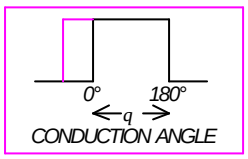
FSH10A04/FSH10A04B



AVERAGE REVERSE POWER DISSIPATION

FSH10A04/FSH10A04B

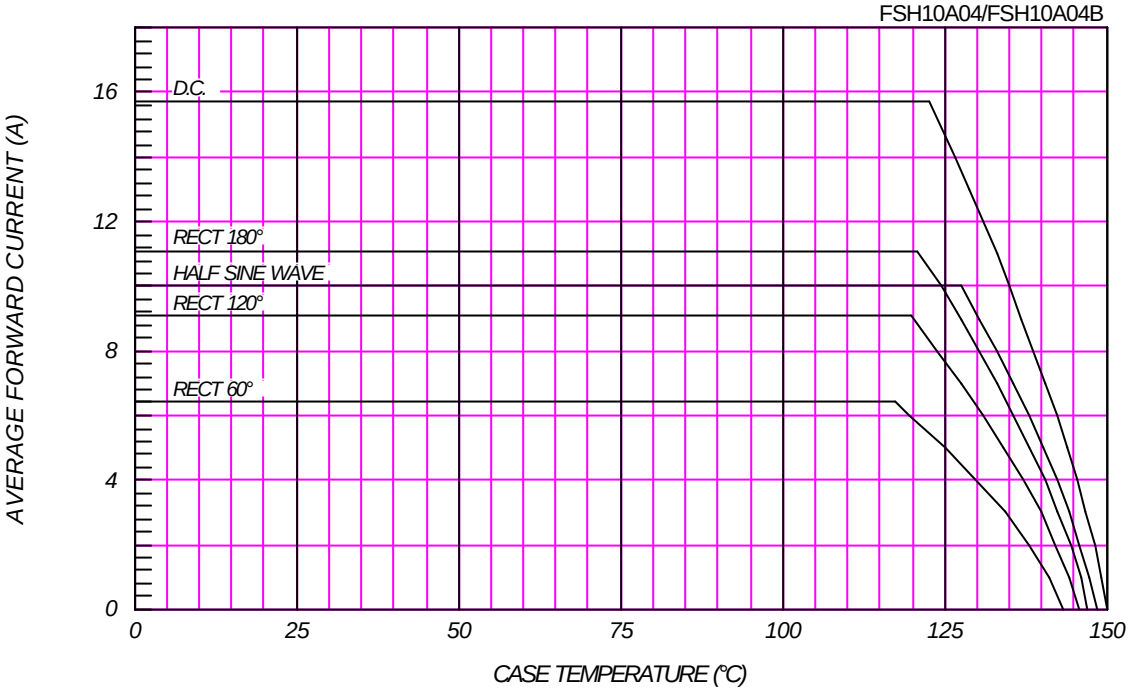




AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

V_{RM}=40 V

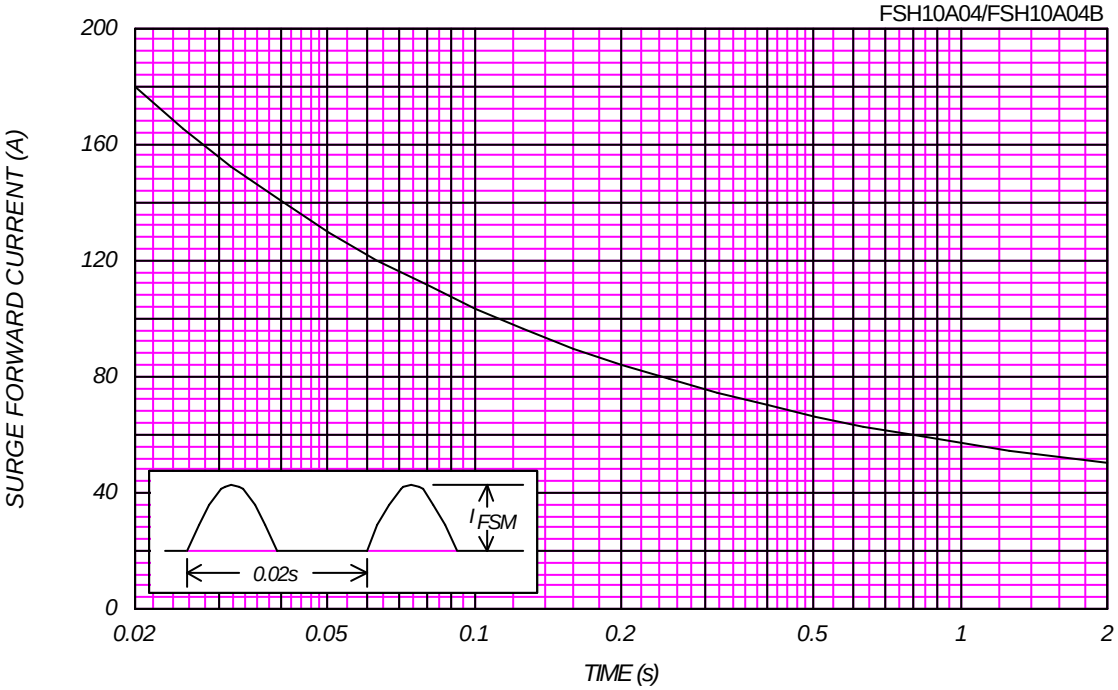
FSH10A04/FSH10A04B



SURGE CURRENT RATINGS

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

FSH10A04/FSH10A04B



JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

Tj=25° C,Vm=20mV$_{RMS}$,f=100kHz,Typical Value

FSH10A04/FSH10A04B