# Nihon Inter Electronics Corporation

#### OUTLINE DRAWING

# $\label{eq:starses} \textbf{FRD} \quad \mathrm{Type}: NSF03A40$

## FEATURES

- \* FLAT-PAK Surface Mount Device
- \* Ultra Fsat Recovery

Maximum Ratings

- \* High Surge Capability
- \* Low Forward Voltage Drop
- $\ast$  Low Power Loss, High Efficiency
- \* Packaged in 16mm Tape and Reel
- \* Not Rolling During Assembly





### Approx Net Weight:016g

	1						
Rating	Symbol	NSF03A40					
Repetitive Peak Reverse Voltage	Vrrm	400				V	
Average Rectified Output Current	Io	1.41	Ta=25 ℃	*1	50Hz Half Sine	А	
		3.0	T1=99 °C *	<sup>6</sup> 2	Wave Resistive Load		
RMS Forward Current	I <sub>F(RMS)</sub>	4.71				А	
Surge Forward Current	I <sub>FSM</sub>	45	50Hz Half Sine Wave,1cycle			A	
		45	Non-repetitive				
Operating JunctionTemperature Range	$T_{jw}$	-40 to +150				°C	
Storage Temperature Range	T <sub>stg</sub>	-40 to +150				°C	

## Electrical • Thermal Characteristics

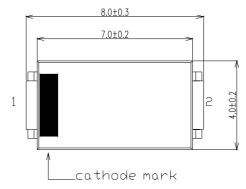
Characteristics	Symbol	Conditions	Min.	Тур.	Max.	Unit	
Peak Reverse Current	I <sub>RM</sub>	Tj= 25°C, V <sub>RM</sub> = V <sub>RRM</sub>	-	-	20	μA	
Peak Forward Voltage	V <sub>FM</sub>	Tj= 25°C, I <sub>FM</sub> = 3.0A	-	-	1.25	V	
Reverse Recovery Time	trr	Ta= 25°C, I <sub>FM</sub> =3 A -di/dt=50A/µs			35	ns	
Thermal Resistance	Rth <sub>(j-a)</sub>	Junction to Ambient *1	-	-	89	°C/W	
	Rth <sub>(j-l)</sub>	Junction to Lead	-	-	13	C / W	

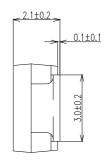
\*1 Alumina Substrate Mounted (Soldering Lands=2x3.5mm,Both Sides)

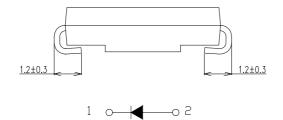
\*2 Tl= Lead Temperature



# NSF03A40 OUTLINE DRAWING (Dimensions in mm)







SOLDERING PAD

