

# NFM-05-5 Switching Power Supply



## Applications

- Single Output Medical Power Supply - DC/DC Converter

## Features and Benefits

- Universal AC input/Full range
- 5V output rated to 1A
- Input range of 85-264V AC, or 120-370V DC
- Short Circuit, Overload, Over Voltage and Over Temperature protections
- Lightweight, Miniature Design
- Isolation Class II
- Medical Safety Approved
- No load power consumption <0.5W
- 100% full load burn-in test
- Reliable and Sturdy, with 3 year manufacturer warranty

## Contact us

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## Distributed By



# NFM-05-5 Switching Power Supply

<b>Model</b>	NFM-05-5
<b>DC Voltage</b>	5V
<b>Rated Current</b>	1A
<b>Current Range</b>	0 ~ 1A
<b>Rated Power</b>	5W
<b>Ripple &amp; Noise (maximum)</b>	80 mVp-p
<b>Voltage Adj. Range</b>	4.5V ~ 5.5V
<b>Voltage Tolerance</b>	±2.0%
<b>Line Regulation</b>	±1.0%
<b>Load Regulation</b>	±1.0%
<b>Setup, Rise Time</b>	1000ms, 20ms/230VAC - 1000ms, 20ms/115VAC at full load
<b>Hold Up Time (typical)</b>	100ms/230VAC-1000ms, 20ms/115VAC at full load
<b>Input Voltage Range</b>	85 ~ 264VAC - 120~370VDC
<b>Input Frequency Range</b>	47Hz ~ 440Hz
<b>Input Efficiency (typical)</b>	71%
<b>Input AC Current</b>	0.12A/115VAC - 0.08A/230VAC
<b>Input Inrush Current (typical)</b>	Cold Start: 25A/115VAC - 45A/230VAC
<b>Input Leakage Current</b>	Tough Current <80microA/264VAC
<b>Overload Protection</b>	Overload: Above 105% Rate output power - Recovers automatically after fault condition is removed.
<b>Overvoltage Protection</b>	Overvoltage: 5.74 ~ 6.75V - Shut down o/p voltage, clamping by zener diode.
<b>Over Temperature Protection</b>	Over temperature: Tj 145°C typically (U1) detect on main control IC - Shut down o/p/ voltage, recovers automatically after temperature returns to operating range.
<b>Working Conditions</b>	-20°C ~ +70°C (Refer to "Derating Curve on next page") 20% ~ 90% Relative Humidity noncondensing
<b>Storage Conditions</b>	-40°C ~ +85°C, 10% ~ 95% Relative Humidity
<b>Vibration Conditions</b>	10Hz ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X,Y,Z axes
<b>Safety Standards</b>	ANSI/AAMI ES60601-1,TUV EN60601-1, IEC60601-1 approved
<b>Isolation Level</b>	Primary-Secondary: 2xMOPP
<b>Withstand Voltage</b>	I/P-O/P:4KVAC
<b>Isolation Resistance</b>	I/P-O/P:100M Ohms / 500VDC / 25°C/ 70% Relative Humidity
<b>EMC Emission</b>	Compliance to EN55011(CISPR11),EN55022 (CISPR22) Class B, EN61000-3-2,-3
<b>Dimensions</b>	58mm L * 45mm W * 19.1mm H - 0.03kg

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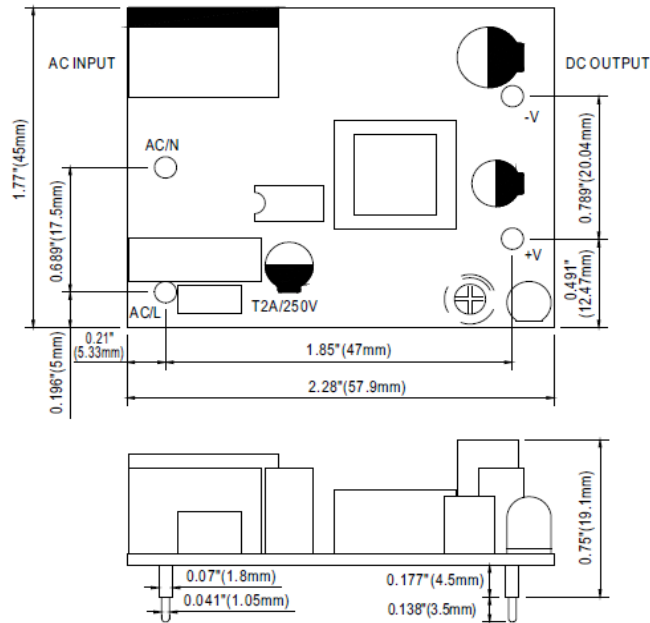
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# NFM-05-5 Switching Power Supply

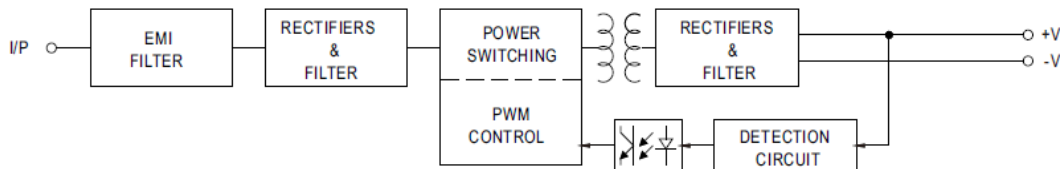
## Mechanical Specification

Unit:inch(mm)

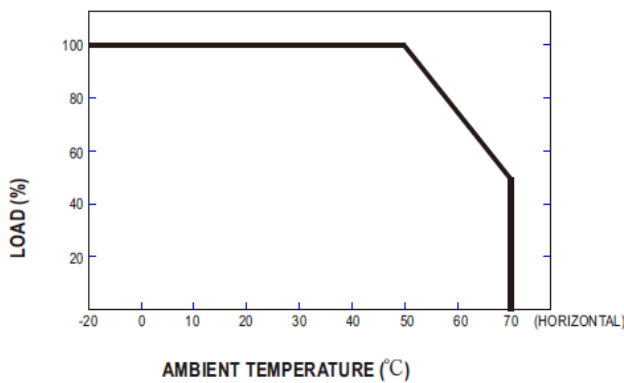


## Block Diagram

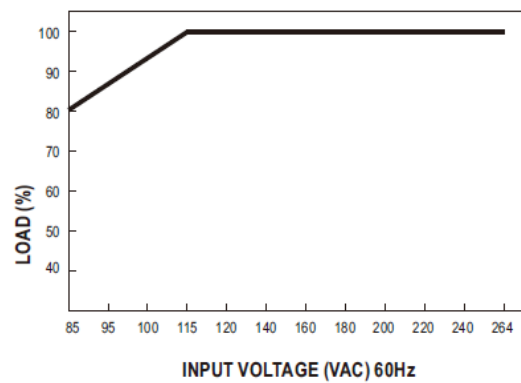
fosc : 67KHz



## Derating Curve



## Output Derating VS Input Voltage



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