







■ Features :

- Universal AC input / Full range
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Ultra-miniature size, light weight
- Cooling by free air convection
- $^{\bullet}$ Isolation class ${\rm I\hspace{-.1em}I}$
- Medical safety approved (2 x MOPP between primary to secondary)
- No load power consumption<0.5W
- 100% full load burn-in test
- Fixed switching frequency at 67KHz
- High reliability
- Suitable for BF application with appropriate system consideration
- 3 years warranty



MODEL		NFM-05-3.3	NFM-05-5	NFM-05-12	NFM-05-15	NFM-05-24
ОИТРИТ	DC VOLTAGE	3.3V	5V	12V	15V	24V
	RATED CURRENT	1.25A	1A	0.42A	0.33A	0.23A
	CURRENT RANGE	0 ~ 1.25A	0 ~ 1A	0 ~ 0.42A	0 ~ 0.33A	0 ~ 0.23A
	RATED POWER	4.125W	5W	5.04W	4.95W	5.52W
	RIPPLE & NOISE (max.) Note.2	80mVp-p	80mVp-p	150mVp-p	150mVp-p	240mVp-p
	VOLTAGE ADJ. RANGE	3 ~ 3.63V	4.5 ~ 5.5V	10.8 ~ 13.2V	13.5 ~ 16.5V	21.6 ~ 26.4V
	VOLTAGE TOLERANCE Note.3	±2.0%	±2.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION	±1.0%	±1.0%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±1.0%	±1.0%	±0.5%	±0.5%	±0.5%
	SETUP, RISE TIME	1000ms, 20ms/230VAC	1000ms, 20ms	/115VAC at full load	<u>'</u>	<u>'</u>
	HOLD UP TIME (Typ.)	100ms/230VAC 24ms/115VAC at full load				
	VOLTAGE RANGE	85 ~ 264VAC 120 ~ 370VDC				
	FREQUENCY RANGE	47 ~ 440Hz				
INPUT	EFFICIENCY (Typ.)	67%	71%	73%	74%	76%
	AC CURRENT (Typ.)	0.12A/115VAC 0.0	8A/230VAC	'		'
	INRUSH CURRENT (Typ.)	COLD START 25A/115VAC 45A/230VAC				
	LEAKAGE CURRENT Note.6	Touch current < 80µ A/264VAC				
PROTECTION	OVERLOAD	Above 105% rated output power				
		Protection type: Hiccup mode, recovers automatically after fault condition is removed				
	OVER VOLTAGE	3.8 ~ 4.95V	5.75 ~ 6.75V	13.8 ~ 16.2V	17.25 ~ 20.25V	27.6 ~ 32.4V
		Protection type: Shut off o/p voltage, clamping by zener diode				
	OVER TEMPERATURE Note.5	Tj 145°C typically (U1) detect on main control IC				
	OVER TEMP ERATORE Note.5	Protection type: Shut down o/p voltage, recovers automatically after temperature goes down				
ENVIRONMENT	WORKING TEMP.	-20 ~ +70 $^{\circ}$ C (Refer to "Derating Curve")				
	WORKING HUMIDITY	20 ~ 90% RH non-condensing				
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH				
	TEMP. COEFFICIENT	$\pm 0.03\%^{\circ}$ C (0 ~ 50°C)				
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes				
	SAFETY STANDARDS	ANSI/AAMI ES60601-1,TUV EN60601-1, IEC60601-1, EAC TP TC 004 approved				
SAFETY &	ISOLATION LEVEL	Primary-Secondary: 2xMOPP				
EMC	WITHSTAND VOLTAGE	I/P-O/P:4KVAC				
(Note 4)	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C/70% RH				
	EMC EMISSION	Compliance to EN55011(CISPR11),EN55032 (CISPR32) Class B, EN61000-3-2,-3, EAC TP TC 020				
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN60601-1-2, EN61204-3, medical level, criteria A, EAC TP TC 020				
OTHERS	MTBF	738.7Khrs min. MIL-HDBK-217F (25°C)				
	DIMENSION	58*45*19.1mm (L*W*H)				
	PACKING	0.03Kg; 120pcs/4.6Kg/0.97CUFT				

- provided by the IC manufacturer.

 6. Touch current was measured from primary input to DC output.

 7. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).



