NB3R5HW-3.5W Series

c¶us CB (€



New 3.5W DC-DC Converter with Reinforced Insulation!

MOTIEN TECHNOLOGY specializes in DC/DC Converters and is proud to present the new product – **NB3R5HW Series**



- ✓ Compact DIP-16-package
- ✓ Wide 4:1 Input Range
- ✓ Isolation Voltage up to 5000VAC
- ✓ Continuous short circuit protection
- ✓ Remote on/off Control
- ✓ Efficiency is up to 84%.
- ✓ Reinforced Insulation for 250Vrms Working Voltage

Comparison of MOTIEN Products:

•	NB3R5HW	VB-2W Series	VK-3W Series
	NB3K5HW		
PIN Connections	14.70 (0.58) DC-DC CONVERTER NB3R5HW-XXXXX MOTIEN XXXX c S Us 24.40 (0.96)	DC-DC CONVERTER VB-XXXXDD2 MOTIEN XXXX cRis	DC-DC CONVERTER VK-XXXXXX MOTIEN
Package	DIP16	DIP16	DIP24
Dimensions	24.4 x 14.7 x 10.8 mm	23.4 x 14 x 10.16 mm	31.75 x 20.32 x 10.16 mm
Pinout compatibility		compatible	Incompatible
Output Power	3.5 W	2 W	3 W
Input Voltage Range	4:1	2:1	4:1
Efficiency	78 %, min.	67 %, min.	75 %, min.
Ripple & Noise	100 mVpk-pk, max.	80 mVpk-pk, max.	60 mVpk-pk, typ.
Load Regulation	±1.0%, max. (0%~100% Load)	±1.0%, max. (25%~100% Load)	±0.5%, max. ±1.5%, max. (Single,Dual 3.3V) (0%~100% Load)
Short Circuit Protection	Yes	Yes	Yes
Maximum Capacitive Load	1470 μF	3300 μF	680 μF
Isolation Voltage (input / output)	5000 VAC	1000~3000 VDC	1500~3500 VDC
Isolation Capacitance	20pF, max.	60pF, max.	500pF, typ.
Leakage Current	2 μA, typ.	-	-
Clearance/Creepage	8 mm, min.	-	-
Operating Temperature	-40 ~ 85°C (full load)	-40 ~ 85°C (full load)	-40 ~ 85°C (full load)
Under Voltage Lockout	Yes	No	No
Remote ON/OFF	Yes	Yes	No
CE Mark	Yes	Yes	Yes
EMI Filter	with external components to meet ClassB	with external components to meet ClassA	with external components to meet ClassA
Safety Approval	IEC / EN /UL 62368-1 (Reinforced Insulation)	IEC / EN / UL 60950-1, 62368-1 (Functional Insulation)	IEC / EN / UL 60950-1, 62368-1 (Designed to meet)

