



# **NDC1840I0217N14B**

18-40 GHZ FREQUENCY DOWN CONVERTER  
WITH OR WITHOUT 0.5-18 GHZ BYPASS



**DATASHEET**

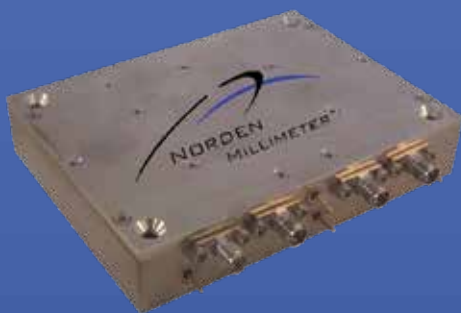
*Norden Millimeter is the leading developer of microwave and millimeter wave products, creating standard and custom RF amplifiers, frequency multipliers, frequency converters, and custom assemblies.*

## **NDC1840I0217N14B FEATURES**

RF Frequencies  
**18-26.5/26.5-40 GHz**

IF Frequencies  
**2.3-10.8/3.2-16.7 GHz**

LO Frequency  
**14.4 GHz**



Conversion Gain Minimum  
**12 dB**

Gain Flatness  
**+/- 2.5 dB**

Operating Temperature  
**0 to +50 deg C**

Norden Millimeter offers wideband frequency Down Converters and down converters for military and commercial applications. The NDC1840I0217N14B is an example of our expanding standard product line. The NDC1840I0217N14B is available with or without a 0.5-18 GHz bypass.

Norden Millimeter also offers custom units incorporating temperature compensation, variable attenuation, defined gain scope and other frequency bands. Norden is ISO 9001:2015 and AS 9100D certified.

We encourage you to contact our sales team at 530-719-4704 to discuss your questions and applications. With down converters, up converters, transceivers, and other products operating between 0.5 and 110 GHz, Norden Millimeter is the top choice for both standard products and custom assemblies.

5441 Merchant Circle  
Placerville, CA 95667  
(530) 719-4704  
[www.NordenGroup.com](http://www.NordenGroup.com)

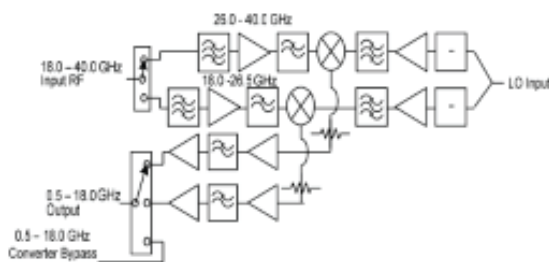
# NDC1840I0217N14B

18-40 GHz FREQUENCY DOWN CONVERTER  
WITH OR WITHOUT 0.5-18 GHz BYPASS

# SPECIFICATIONS

RF Frequency	18-26.5/26.5-40	GHz
IF Frequency	2.3-10.8/3.2-16.7	GHz
Bypass Frequency	0.5-18	GHz
LO Fundamental Frequency	14.4	GHz
LO Drive	-3 to 0	dBm
Conversion Gain Minimum	12	dB
Gain Flatness	+/- 3.0	dB
Gain Variation Over Temperature Typ	+/- 0.5	dB
Noise Figure Maximum	14.5	dB
Input P1 dB Typ	-20	dBm
Image Rejection Minimum	65	dBc
RF/LO/IF Return Loss Maximum	-7.36	dB
LO-IF Leakage Maximum	-65	dBm
LO-RF Leakage Manimum	-70	dBm
Data Temp	25	c

### BLOCK DIAGRAM



### LOGIC CONTROL (TTL)

LOGIC	BAND 1 (18-26.5)	Band 2 (26.6-40)	IF Bypass (0.5-18)
Band Switch	0	1	X
Bypass Switch	0	0	1

Power Supply: Voltage 8-12 VDC  
Current 1400 mA

RF Connector: 2.92mm Female  
LO/IF/Bypass Connectors: SMA Female



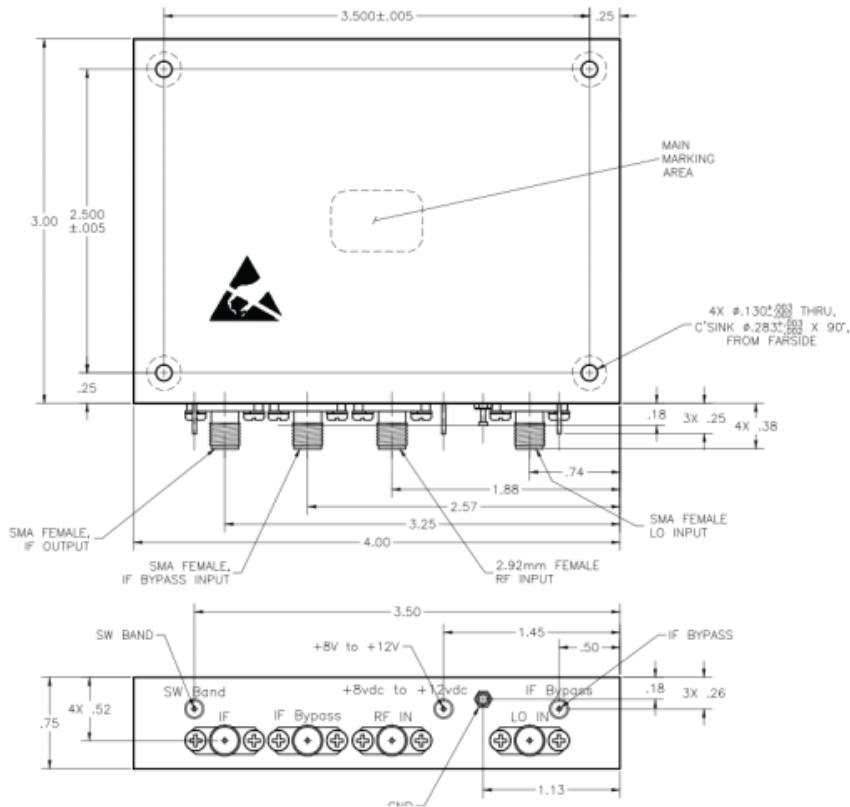
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## MECHANICAL OUTLINE

# NDC1840I0217N14B

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WITH OR WITHOUT 0.5-18 GHz BYPASS

SPECIFICATIONS



Heat Sink Required



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