

## DC-18 GHz

Thumb Wheel  
and Panel Mount  
Step Attenuators

- Broadband DC-18 GHz
- Small Size
- Precision Construction/High Reliability
- Precision 1 dB steps, to 69 dB
- Panel Mount or Stand Alone\*

\* Field-installable Mounting Kit must be purchased separately as Part No. 43017200

NOTE: Rack Mounting Kit accommodates all attenuator series housings.

## Specifications

	Model 741	Model 743-60	Model 745-69																																																								
Type N Female Connectors SMA Female Connectors	4741	4743-60	4745-69																																																								
Frequency Range (GHz)	DC-18	DC-18	DC-18																																																								
Attenuation (dB)	0-9dB in 1-dB steps	0-60 dB in 10-dB steps	0-69 dB in 1-dB steps																																																								
Relative (dB) Attenuation Deviation	<table border="1"> <thead> <tr> <th>Step</th> <th>Deviation</th> </tr> </thead> <tbody> <tr><td>0 dB</td><td>0.5</td></tr> <tr><td>1 dB</td><td>±0.5</td></tr> <tr><td>2 dB</td><td>±0.5</td></tr> <tr><td>4 dB</td><td>±0.5</td></tr> <tr><td>3 dB</td><td>±0.5</td></tr> <tr><td>5 dB</td><td>±0.5</td></tr> <tr><td>6 dB</td><td>±0.5</td></tr> <tr><td>7 dB</td><td>±0.5</td></tr> <tr><td>8 dB</td><td>±0.5</td></tr> <tr><td>9 dB</td><td>±0.5</td></tr> </tbody> </table>	Step	Deviation	0 dB	0.5	1 dB	±0.5	2 dB	±0.5	4 dB	±0.5	3 dB	±0.5	5 dB	±0.5	6 dB	±0.5	7 dB	±0.5	8 dB	±0.5	9 dB	±0.5	<table border="1"> <thead> <tr> <th>Step</th> <th>Deviation</th> </tr> </thead> <tbody> <tr><td>0</td><td>0.5</td></tr> <tr><td>10</td><td>±0.5</td></tr> <tr><td>20</td><td>±0.7</td></tr> <tr><td>30</td><td>±0.9</td></tr> <tr><td>40</td><td>±1.0</td></tr> <tr><td>50</td><td>±1.3</td></tr> <tr><td>60</td><td>±1.5</td></tr> </tbody> </table>	Step	Deviation	0	0.5	10	±0.5	20	±0.7	30	±0.9	40	±1.0	50	±1.3	60	±1.5	<table border="1"> <thead> <tr> <th>Step</th> <th>Deviation</th> </tr> </thead> <tbody> <tr><td>0</td><td>1.0</td></tr> <tr><td>1-9</td><td>±0.5</td></tr> <tr><td>10-19</td><td>±1.0</td></tr> <tr><td>20-29</td><td>±1.2</td></tr> <tr><td>30-39</td><td>±1.4</td></tr> <tr><td>40-49</td><td>±1.5</td></tr> <tr><td>50-59</td><td>±1.9</td></tr> <tr><td>60-69</td><td>±2.0</td></tr> </tbody> </table>	Step	Deviation	0	1.0	1-9	±0.5	10-19	±1.0	20-29	±1.2	30-39	±1.4	40-49	±1.5	50-59	±1.9	60-69	±2.0
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Resettability/per drum (dB)	<0.05	<0.05	<0.05																																																								
VSWR (Max)	1.50	1.50	DC-12.4 GHz;1.50 12.4-18 GHz;1.65																																																								
Impedance (Ohms)	50	50	50																																																								
Temperature Stability (dB/dB/°C)	0.0001	0.0001	0.0001																																																								
Power:																																																											
Average (Watts)	2	2	2																																																								
Peak (kW at duty cycle of 0.0001)	0.2	0.2	0.2																																																								



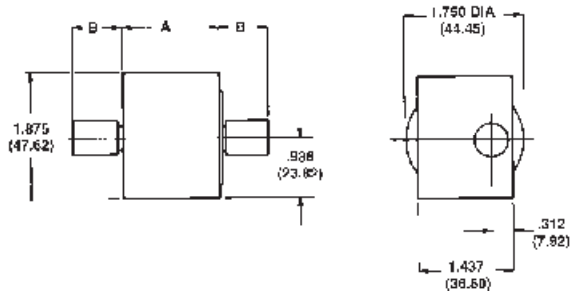
# Variable Attenuators

50 Years of  
Excellence

## Ordering Information

- Prefix "7" denotes Type N Stainless Steel Connectors (741, 743, 745)  
Prefix "47" denotes SMA Stainless Steel Connectors (4741, 4743, 4745)
- All units are bidirectional.

## Outline Drawings



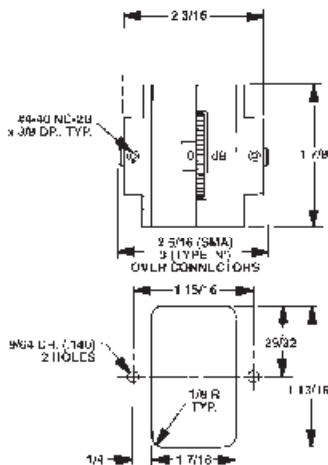
Dimensions in parentheses are in millimeters and for reference only.

Connectors made without interference per MIL-STD-348.

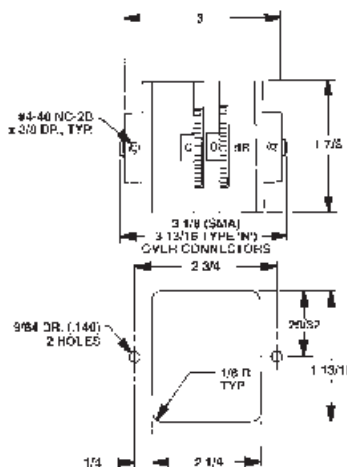
Model No.	A	B (MAX)	CONN
741	1.125 (28.75)	.781 (19.83)	TYPE N FEMALE
743-60	1.437 (36.50)		
745-69	2.250 (57.15)		

Model No.	A	B (MAX)	CONN
4741	1.125 (28.75)	.437 (11.10)	TYPE SMA FEMALE
4743-60	1.437 (36.50)		
4745-69	2.250 (57.15)		

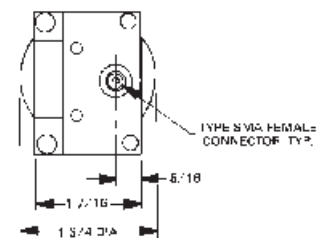
## Typical Rack Mount Configurations For 740 Series Thumb Wheel Step Attenuators



TYPICAL PANEL  
CUTOUT SINGLE\*



TYPICAL PANEL  
CUTOUT DUAL\*



TYPICAL  
SINGLE AND DUAL  
STAND ALONE

\* Requires Mounting Kit, Part No. 43017200

All dimensions are max. unless otherwise specified.

