

# Programmable Attenuators



## Model 4203 Digital Attenuator with Built-in TTL Driver

0.2 to 3 GHz



### Features

- /// Ideal for Automated Test Equipment (ATE), WiMAX, 3G Fading Simulators, Engineering/Production Test Lab environments
- /// Excellent Repeatability & Performance
- /// Custom Configurations Available Upon Request
- /// Ruggedized Construction

### Description

Aeroflex / Weinschel's new line of MMIC Digital Attenuator operates over the 0.2 to 3 GHz frequency range and is in a variety of attenuation ranges.

### Specifications

**NOMINAL IMPEDANCE:** 50  $\Omega$   
**FREQUENCY RANGE:** 0.2 to 3.0 GHz

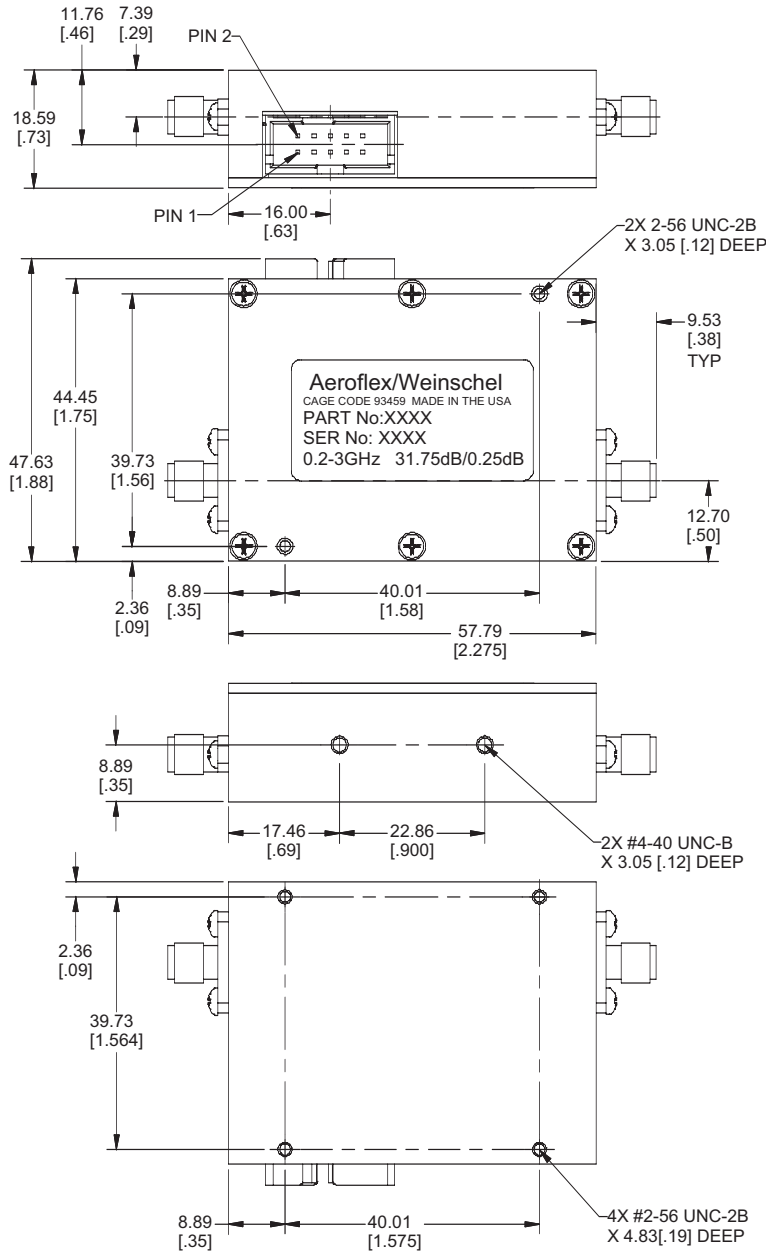
CELL CONFIGURATIONS:		
Model Number	Attenuation Range/Steps (dB)	Attenuation Increments (dB)
4203-31.75	0 -31.75 / 0.25	0.25, 0.5, 1, 2, 4, 8, 16
4203-63	0-63 / 1	1, 2, 4, 8, 16, 32

ATTENUATION ACCURACY:								
CELL	0.25	0.50	1	2	4	8	16	32
dB	$\pm 0.15$	$\pm 0.15$	$\pm 0.2$	$\pm 0.2$	$\pm 0.3$	$\pm 0.4$	$\pm 0.6$	$\pm 1.2$

MAXIMUM INSERTION LOSS (dB):		
Frequency (GHz)	4203-31.75	4203-63
0.2 - 3.0	4.5	4.0

**MAXIMUM SWR:** 1.4:1  
**POWER RATING:** +24 dBm maximum  
**SWITCHING SPEED:** 1  $\mu$ Sec maximum  
**CONTROL LOGIC:** TTL  
**OPERATING VOLTAGE:** +5 V @ 20 mA  
**TEMPERATURE RANGE:** 0°C to +70°C  
**TEST DATA:** Test data can be provided at additional cost.  
**CONNECTORS:** SMA female connector - mates non-destructively with other SMA connector per MIL-C-39012, 3.5mm and other 2.92mm connector.  
**CONTROL CONNECTOR:** AMP-Latch 10 pin ribbon cable connector mates with AMP P/N 746285-1 (supplied with each unit)  
**CONTROL CONFIGURATION:** Units are supplied with a built-in TTL interface. Each unit is supplied with a mating 10 pin connector (Amp 746285-1). Refer to Physical Dimensions for mating connector pin/wiring details. Two wires are specified for supply voltage and ground. The remaining wires will accept TTL control signals to activate or de-activate a particular attenuation cell. A TTL high will energize a cell to the high attenuation state, whereas a TTL low will maintain a cell in its zero attenuation state.  
**WEIGHT:** 83 g (2.92 oz)

## PHYSICAL DIMENSIONS:



### Control Connector J3 Pin Locations:

TTL Conn PIN No. (J3)	4203-31.75 dB (Cell)	4203-63 dB (Cell)
1	0.25	1.0
2	0.5	2.0
3	1.0	4.0
4	2.0	8.0
5	4.0	16.0
6	8.0	32.0
7	16.0	NC
8	NC	NC
9	+5V	+5V
10	GND	GND

NC = Not Connected

NOTE: All dimensions are given in mm (inches) and are maximum, unless otherwise specified.