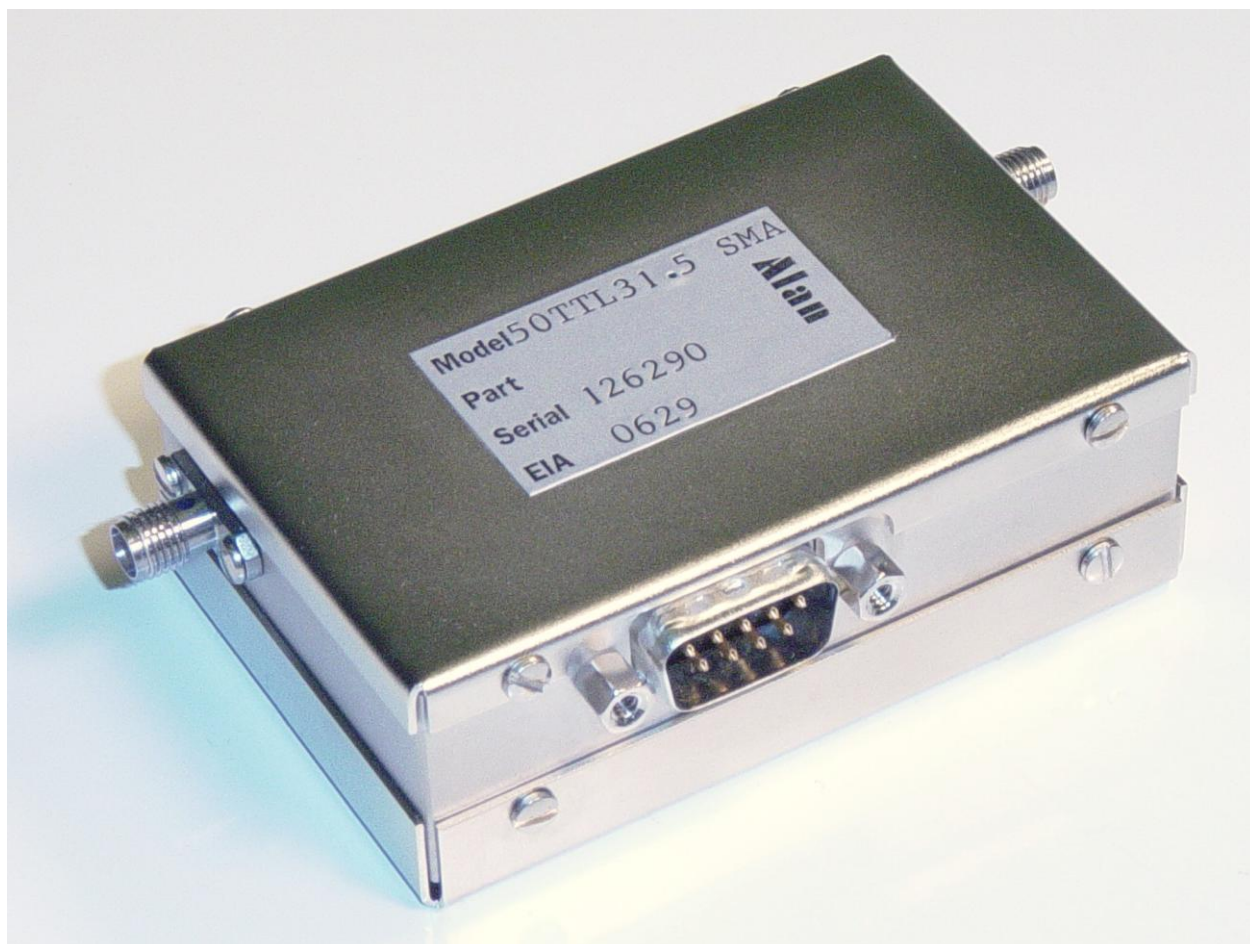




**The Name for
Attenuators**

PROGRAMMABLE ATTENUATORS TTL LOGIC TTL Series

Alan Industries' TTL Series of Programmable Attenuators combines the features of our popular MDA series with a direct TTL interface. This series is ideal for ATE testing over the frequency range of DC-1500 MHz with a total attenuation range up to 127 dB. With the TTL Logic circuitry located entirely within the housing, all DC and TTL connections are made via a convenient multipin connector. Available supply voltages are 5, 12 or 26 Volts with 26 Volts standard. This series is available in 50 or 75 Ohm impedance.



Alan

Industries, Inc.

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**The Name for
Attenuators**

TTL Series

50 OHM ELECTRICAL SPECIFICATIONS

MODEL	50TTL1.5	50TTL15	50TTL31.5	50TTL63	50TTL127
ATTENUATION RANGE	0 - 1.5 dB	0 - 15 dB	0 - 31.5 dB	0 - 63 dB	0 - 127 dB
ATTENUATION STEPS	0.1, 0.2, 0.4, 0.8	1, 2, 4, 8	0.5, 1, 2, 4, 8, 16	1, 2, 4, 8, 16, 32	1, 2, 4, 8, 16, 32, 64
FREQUENCY RANGE	DC - 1000 MHz	DC - 1500 MHz			
OVERALL ACCURACY @ 500 MHz	± 0.1 dB	± 0.5 dB			± 0.5 dB 0 - 31 ± 1.0 dB 32 - 127
@ 1000 MHz	± 0.15 dB	± 0.75 dB			± 0.7 dB 0 - 31 ± 1.5 dB 32 - 127
@ 1500 MHz	N/A	± 1.5 dB			± 1.0 dB 0 - 31 ± 2.0 dB 32 - 127
INSERTION LOSS MAXIMUM	1.7 dB	3.0 dB	3.5 dB	3.5 dB	4.0 dB
SWR MAXIMUM @ 500 MHz	1.3:1	1.2:1			
@ 1000 MHz	1.4:1				
@ 1500 MHz	N/A	1.5:1			
AVERAGE POWER	1 Watt	0.5 Watt			
CONNECTORS, RF	Female SMA, SMB, SMC or BNC				
DC SUPPLY	+26 VDC @ 17 ma per bit is standard, +5 VDC and +12 VDC available				
SWITCHING SPEED	6 milliseconds maximum				
SWITCH LIFE	10,000,000 selections per bit				
TTL LOGIC	TTL Positive Logic				
NUMBER OF BITS	4	4	6	6	8
RoHS COMPLIANCE	RoHS Compliant upon request				

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**The Name for
Attenuators**

TTL Series

75 OHM ELECTRICAL SPECIFICATIONS

MODEL	75TTL15	75TTL31.5	75TTL63	75TTL127
ATTENUATION RANGE	0 - 15 dB	0 - 31.5 dB	0 - 63 dB	0 - 127 dB
ATTENUATION STEPS	1, 2, 4, 8	0.5, 1, 2, 4, 8, 16	1, 2, 4, 8, 16, 32	1, 2, 4, 8, 16, 32, 64
FREQUENCY RANGE	DC - 1GHz* 750 MHz with F connector			
OVERALL ACCURACY @ 500 MHz	0.5 dB			0.5 dB 0 - 31 1.0 dB 32 - 127
@ 1000 MHz	0.75 dB			0.7 dB 0 - 31 1.5 dB 32 - 127
INSERTION LOSS MAXIMUM	3.0 dB	3.5 dB	3.5 dB	4.0 dB
SWR MAXIMUM	1.5:1			
AVERAGE POWER	0.5 Watt			
CONNECTORS, RF	Female BNC, F or SMB			
DC SUPPLY	+26 VDC @ 17 ma per bit is standard, +5 VDC and +12 VDC available			
SWITCHING SPEED	6 milliseconds maximum			
SWITCH LIFE	10,000,000 selections per bit			
TTL LOGIC	TTL Positive Logic			
NUMBER OF BITS	4	6	6	8
RoHS COMPLIANCE	RoHS Compliant upon request			

TO ORDER SPECIFY: Model number as appears above, add connector type. For example, to order a unit with 63 dB of attenuation range and SMA connectors, order Alan Model 50TTL63 SMA.

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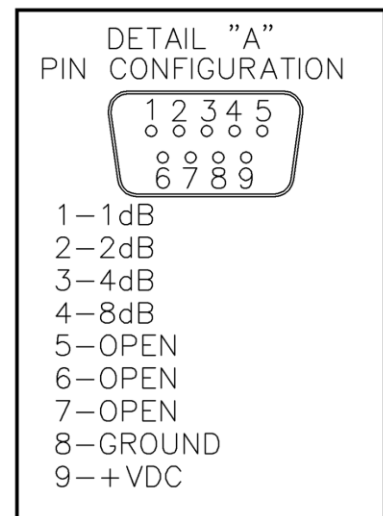
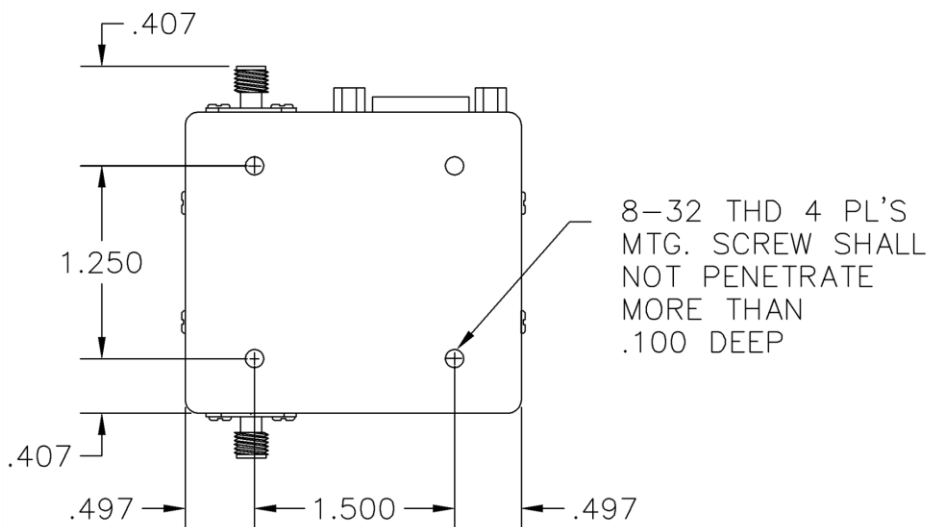
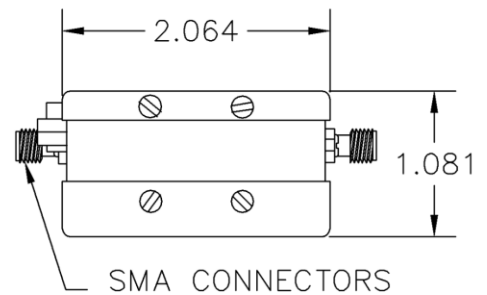
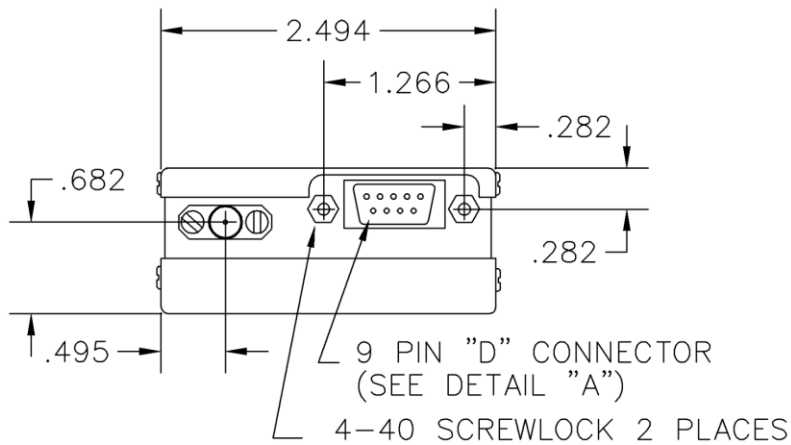
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The Name for
Attenuators

TTL Series

PHYSICAL DIMENSIONS 4 BIT



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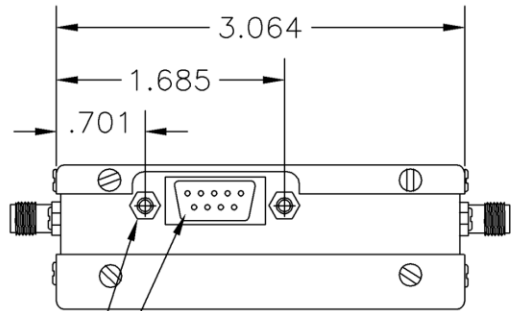
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The Name for
Attenuators

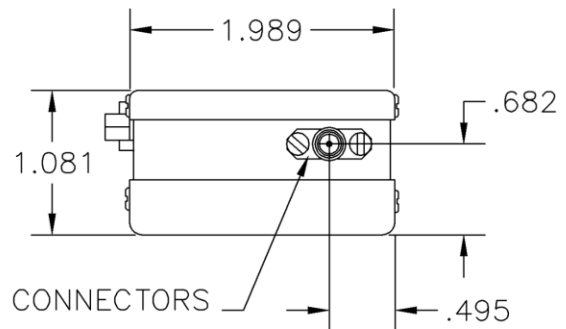
TTL Series

PHYSICAL DIMENSIONS 6 BIT

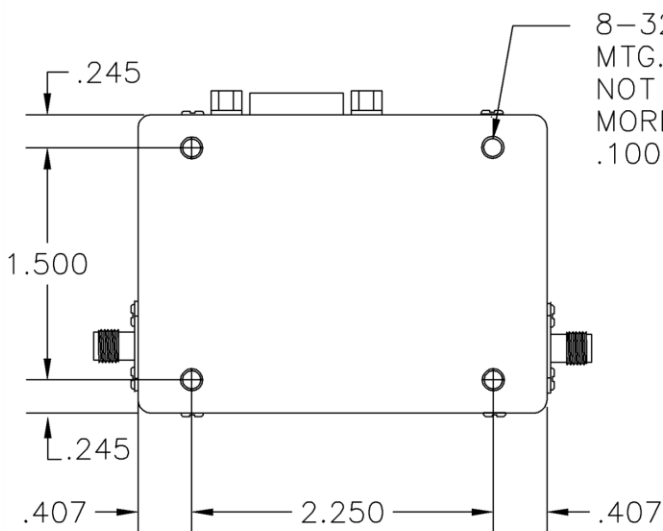


9 PIN "D" CONNECTOR
(SEE DETAIL "A")

4-40 SCREWLOCK 2 PLACES

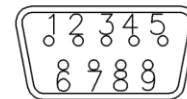


SMA CONNECTORS



8-32 THD 4 PL'S
MTG. SCREWS SHALL
NOT PENETRATE
MORE THAN
.100 DEEP

DETAIL "A"
PIN CONFIGURATION



50TTL31.5	50TTL63
1-0.5dB	1-1dB
2-1dB	2-2dB
3-2dB	3-4dB
4-4dB	4-8dB
5-8dB	5-16dB
6-16dB	6-32dB
7-OPEN	7-OPEN
8-GROUND	8-GROUND
9-+VDC	9-+VDC

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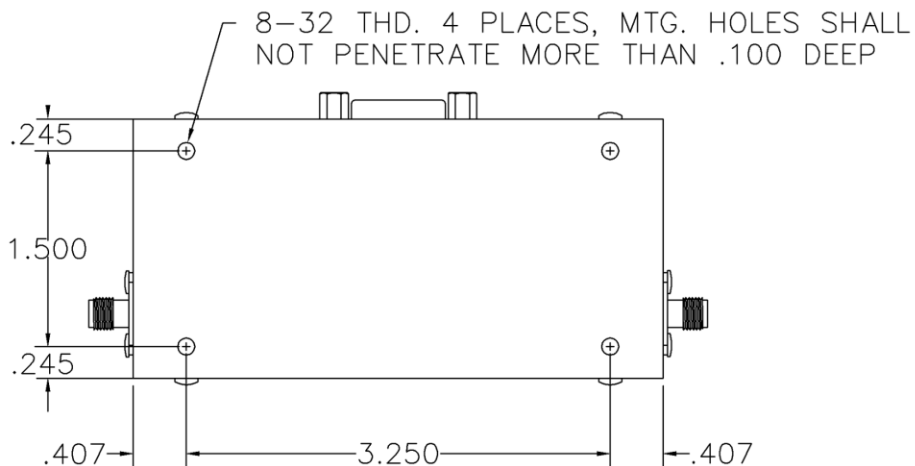
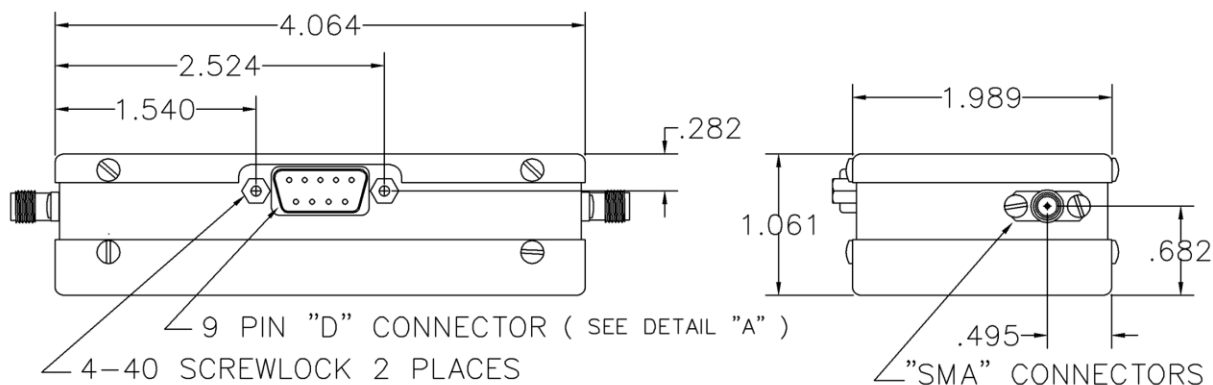
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**The Name for
Attenuators**

TTL Series

PHYSICAL DIMENSIONS 8 BIT



DETAIL "A"	
PIN CONFIGURATION	
1	- 1dB.
2	- 2dB
3	- 4dB
4	- 8dB
5	- 16dB
6	- 32dB
7	- 64dB
8	- GROUND
9	- +VDC

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