DC Passing

Attenuator Fixed

NAT-3DC+

50Ω 200 to 2500 MHz

CASE STYLE: FF57

Connectors	Model	Price	Qty.
N-Type	NAT-3DC+	$19.95 ea.	(1-9)

Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C

Permanent damage may occur if any of these limits are exceeded.

Features

- high DC current handling
- high DC breakdown voltage
- DC resistance (in/out) 0.1Ω, typ.

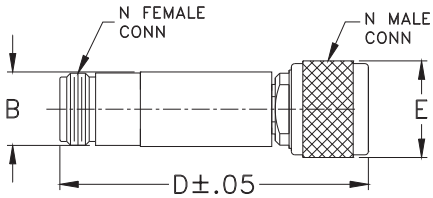
Applications

- power passing
- instrumentation
- test equipment
- lab use

+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

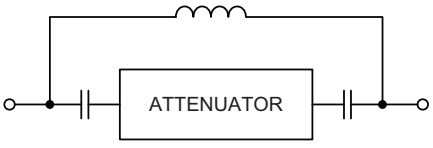
Outline Drawing



Outline Dimensions (inch / mm)

B	D	E	wt
.67	2.90	.82	grams
17.02	73.66	20.83	90.0

Electrical Schematic

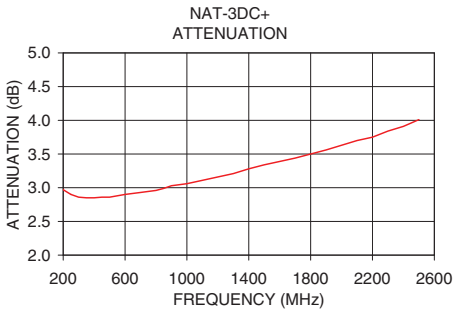


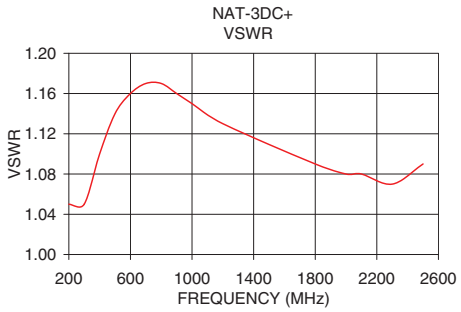
Electrical Specifications (T_{AMB}= 25°C)

FREQUENCY (MHz)	ATTENUATION (dB)		VSWR (:1)	POWER (mW)	DC CURRENT (Amps)	DC BREAKDOWN (Volts)
	Nom.	Flatness, Max.	Max.	Max.	Max.	Max.
200 - 2500	3± 0.5	± 0.8	1.25	500	1	60

Typical Performance Data at 25°C

Frequency (MHz)	Attenuation (dB)	VSWR (:1)
200.00	2.97	1.05
300.00	2.86	1.01
400.00	2.85	1.04
500.00	2.86	1.07
600.00	2.90	1.10
700.00	2.93	1.12
800.00	2.96	1.14
900.00	3.03	1.16
1000.00	3.06	1.17
1200.00	3.16	1.19
1300.00	3.21	1.20
1400.00	3.28	1.20
1500.00	3.34	1.20
1600.00	3.39	1.20
1700.00	3.44	1.19
1800.00	3.50	1.18
2000.00	3.63	1.15
2100.00	3.70	1.13
2300.00	3.84	1.09
2500.00	4.01	1.05





REV. OR
M95013
NAT-3DC+
ED-11883/1
HY/RAV
121023

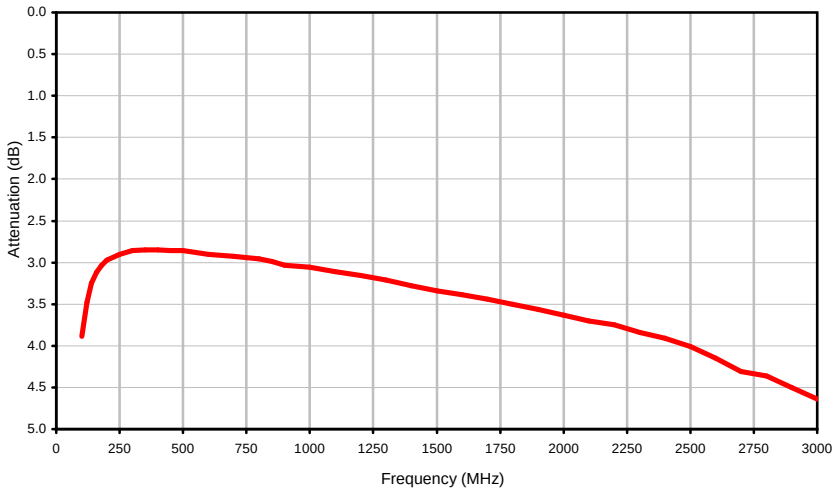
Fixed Attenuator, DC Passing NAT-3DC+

Typical Performance Data

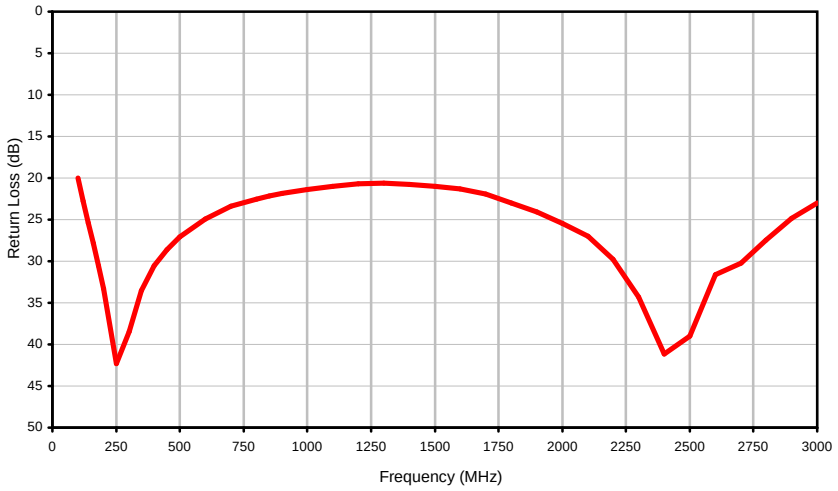
FREQUENCY (MHz)	ATTENUATION (dB)	FEMALE RETURN LOSS (dB)	MALE RETURN LOSS (dB)
100	3.89	19.97	19.96
120	3.48	22.78	22.66
140	3.25	25.35	25.10
160	3.12	27.88	27.42
180	3.03	30.51	29.76
200	2.97	33.34	32.24
250	2.90	42.29	40.65
300	2.86	38.46	45.65
350	2.85	33.54	37.41
400	2.85	30.52	33.44
450	2.86	28.59	30.92
500	2.86	27.08	29.10
600	2.90	24.90	26.54
700	2.93	23.42	24.83
800	2.96	22.50	23.67
850	2.99	22.13	23.21
900	3.03	21.84	22.82
1000	3.06	21.41	22.15
1100	3.11	20.98	21.57
1200	3.16	20.66	21.24
1300	3.21	20.63	20.99
1400	3.28	20.79	20.84
1500	3.34	20.97	20.81
1600	3.39	21.28	20.94
1700	3.44	21.96	21.26
1800	3.50	23.01	21.63
1900	3.56	24.08	22.10
2000	3.63	25.43	22.95
2100	3.70	26.98	24.06
2200	3.75	29.75	25.34
2300	3.84	34.31	26.98
2400	3.91	41.17	29.23
2500	4.01	39.03	32.31
2600	4.15	31.64	35.58
2700	4.31	30.23	44.50
2800	4.36	27.43	33.17
2900	4.50	24.86	28.59
3000	4.64	23.00	25.67

Typical Performance Curves

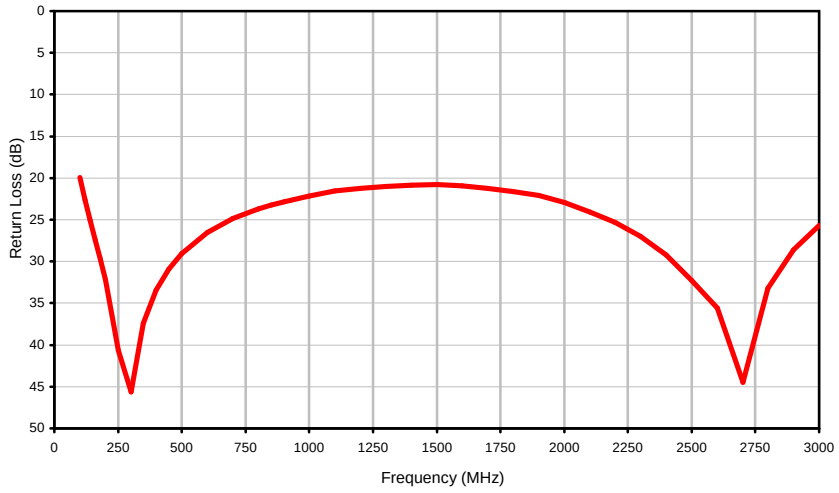
Attenuation



Female Return Loss



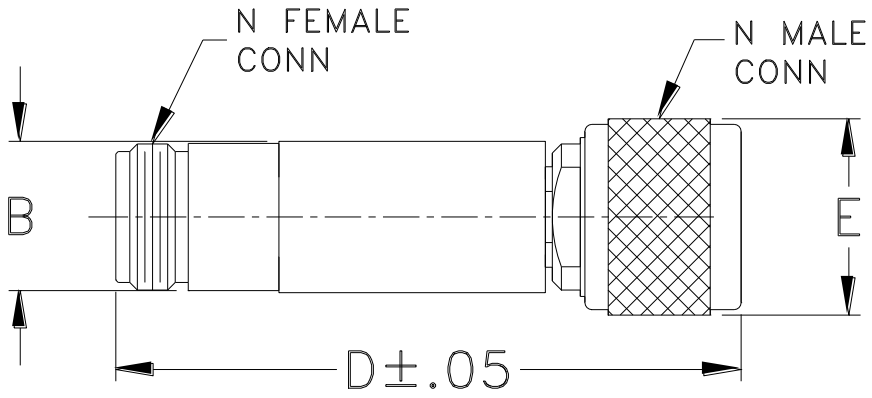
Male Return Loss



Case Style FF

FF57

Outline Dimensions



CASE #.	A	B	C	D	E	WT GRAMS
FF57	-- --	.70 (17.78)	-- --	2.90 (73.66)	.82 (20.83)	90.0

Dimensions are in inches (mm). Tolerances: 2Pl. ± .03; 3Pl. ± .015

Note:

1. Case material: Stainless steel.

Mini-Circuits

Environmental Specifications ENV28

All Mini-Circuits products are manufactured under exacting quality assurance and control standards, and are capable of meeting published specifications after being subjected to any or all of the following physical and environmental test.

Specification	Test/Inspection Condition	Reference/Spec
Operating Temperature	-55° to 100°C Ambient Environment	Individual Model Data Sheet
Storage Temperature	-55° to 100° C Ambient Environment	Individual Model Data Sheet
Barometric Pressure	100,000 Feet	MIL-STD-202, Method 105, Condition D
Humidity	90% RH, 65°C Units may require bake-out after humidity to restore full performance.	MIL-STD-202, Method 103
Thermal Shock	-65° to 125°C, 5 cycles	MIL-STD-202, Method 107, Condition B
Vibration (High Frequency)	20g peak, 10-2000 Hz, 12 times in each of three perpendicular directions (total 36)	MIL-STD-202, Method 204, Condition D
Mechanical Shock	100g, 6ms sawtooth, 3 shocks each direction 3 axes (total 18)	MIL-STD-202, Method 213, Condition I