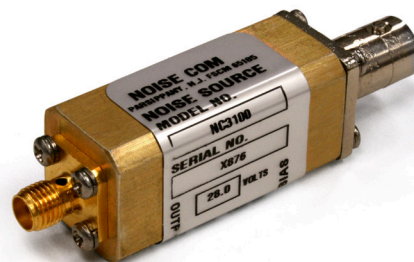


# NC3000 Series

## 10 MHz to 110 GHz



### Calibrated Coaxial AWGN Noise Sources

The Noisecom NC3000 Series calibrated AWGN noise source embody excellent stability with temperature and voltage. They are well suited for receiver testing, noise figure measurements, and any application requiring broad bandwidth and fast switching time. The NC3000 Series includes the NC3100 units that feature  $15.5\text{-dB} \pm 0.75\text{ dB ENR}$  output for noise-figure meters, and the NC3200 Series high-output noise sources that feature output between  $26\text{ and }35\text{ dB} \pm 1\text{ dB ENR}$  for radar and satellite communications system testing.

Like all Noisecom noise sources, the NC3000 Series features hermetically sealed noise diodes and each noise source is supplied with calibration data for the full frequency band.

### Applications

- Radar warning receivers (RWR)
- Built-in test equipment (BITE)
- Military aircraft
- Automotive Radar
- Ultra-low Latency Wireless Backhaul
- 802.11ad High-Speed Wi-Fi

### Specifications

Noise output rise and fall times	Less than 1 $\mu\text{s}$
VSWR	Less than 3:1
Noise output variation	
Temperature	Less than 0.01 dB/ $^{\circ}\text{C}$
Voltage	-55 $^{\circ}$ to +85 $^{\circ}\text{C}$
Operating temperature	-55 $^{\circ}$ to 85 $^{\circ}\text{C}$
Storage temperature	-65 $^{\circ}$ to +125 $^{\circ}\text{C}$
Input power	+28 VDC 20 mA typical
Noise output	23 to 27 dB ENR

Specifications subject to change without notice

## NC3100 - 15.5 dB Noise Figure Meter Compatible Types

Mode	Frequency Range (GHz)	Noise Output ENR (dB)	Maximum VSWR ON	Calibration Frequencies
NC3101	0.01 - 8	15.5 ± 1.0	1.35:1	10 MHz, 100 MHz, 1 GHz steps
NC3102	0.01 - 12	15.5 ± 1.0	1.35:1	10 MHz, 100 MHz, 1 GHz steps
NC3103	1 - 12	15.5 ± .75	1.35:1	1 GHz steps
NC3104	1 - 18	15-16 ± 1	1.5:1	1 GHz steps
NC3105	12 - 18	15.5 ± .75	1.5:1	1 GHz steps
NC3108	0.5 - 18	15-16 ± 1	1.5:1	1 GHz steps

## NC3200 - High Noise Output Types

Model	Frequency Range (GHz)	Noise Output ENR (dB)	Flatness (dB)	Calibration Frequencies
NC 3201	0.01 - 1	30-35	± 1	10, 100, 500, 1000 MHz
NC 3202	0.01 - 0.6	30-35	± 1	10, 100, 600 MHz
NC 3203	1 - 2	30-35	± 1	1, 1.5 & 2 GHz
NC 3204	2 - 4	30-35	± 1	1 GHz steps
NC 3205	4 - 8	30-35	± 1	1 GHz steps
NC 3206	8 - 12	28-33	± 1	1 GHz steps
NC 3207	12 - 18	26-32	± 1	1 GHz steps
NC 3208	1 - 18	26-32	± 1	1 GHz steps
NC 3240*	2 - 40	>20		1 GHz steps
NC 3250A**	2 - 50	>15		1 GHz steps
NC 3257A**	50 - 67	>15		1 GHz steps
NC 3267A**	2 - 67	>15		1 GHz steps
NC 3290M***	2 - 90	>15		1 GHz steps
NC 3210M***	2 - 110	>15		1 GHz steps

\*2.92mm, K male or female connectors

\*\*1.85mm, V male or Female Connector

\*\*\*1.0mm Male Connector

## NC3200K Series - High Noise Output Types

Model	Frequency Range (GHz)	Noise Output ENR (dB)	Flatness (dB)	VSWR	Calibration Frequencies	I (max) (mA)
NC 3201K	10 kHz - 1 GHz	23-27	± 1.5	3:1	10, 100, 500 and 1000 MHz	30
NC 3208K	1 GHz - 18 GHz	23-27	± 1	3:1	1 GHz steps	30

## Options

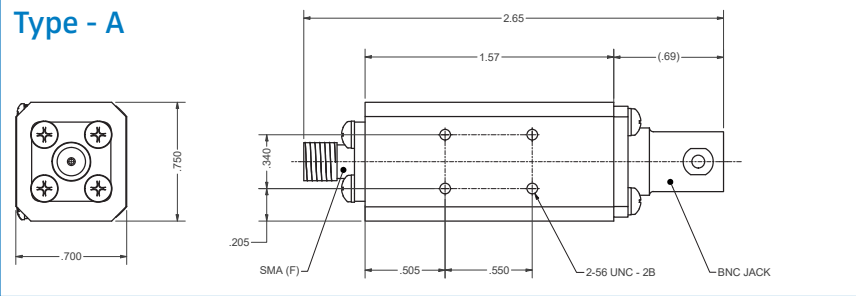
1. Packages A, B, C, F, G, H, J can be supplied with threaded mounting holes
2. Alternate sex of output connector
3. +15 VDC input voltage. (Not available on all sources, consult factory)
4. +28 VDC regulation. Stabilized output ± 2 V variation. (Consult factory for package dimensions)

NC3Kopt01 +15 VDC input voltage

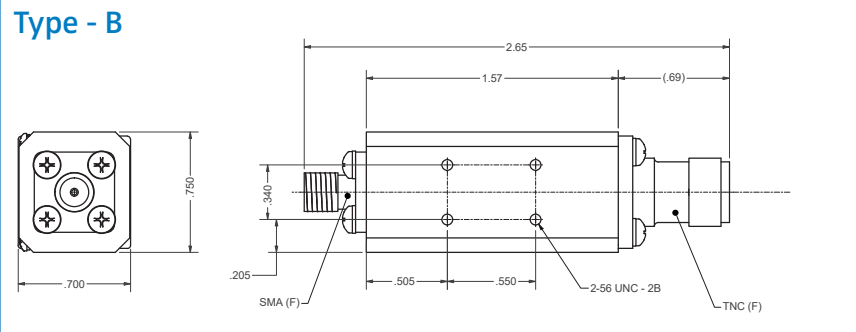
NC3Kopt02 MIL-STD-883 screening

Package Type Diagrams

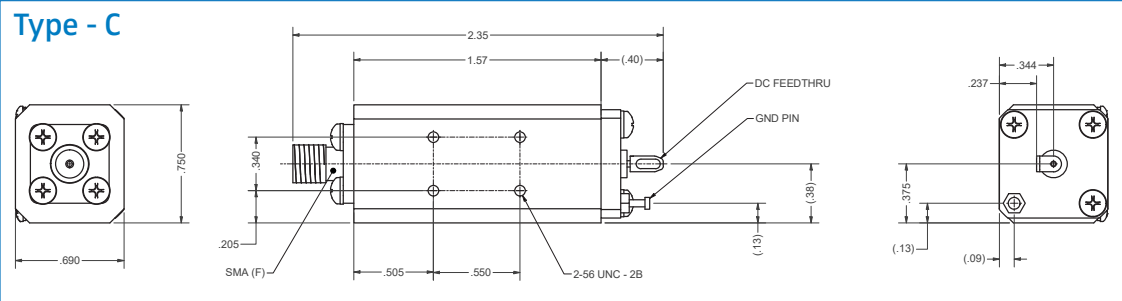
Type - A



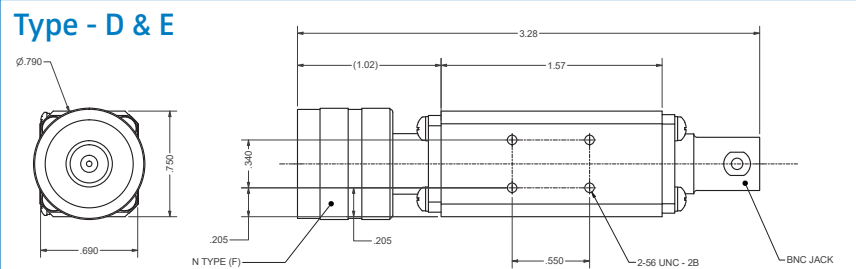
Type - B



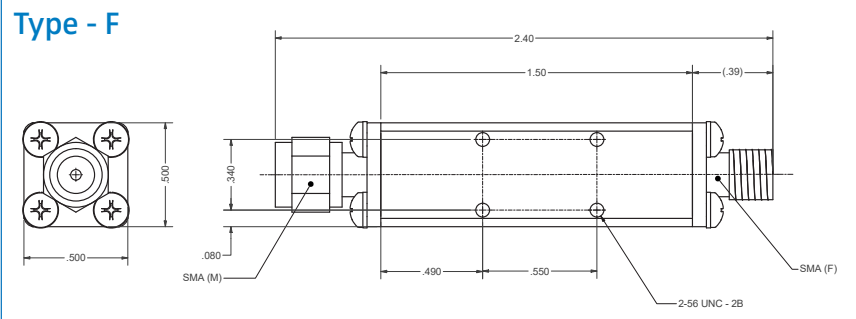
Type - C



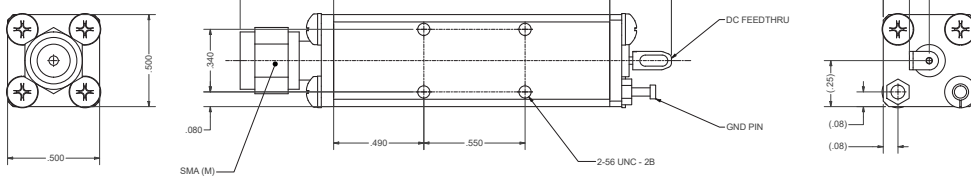
Type - D & E



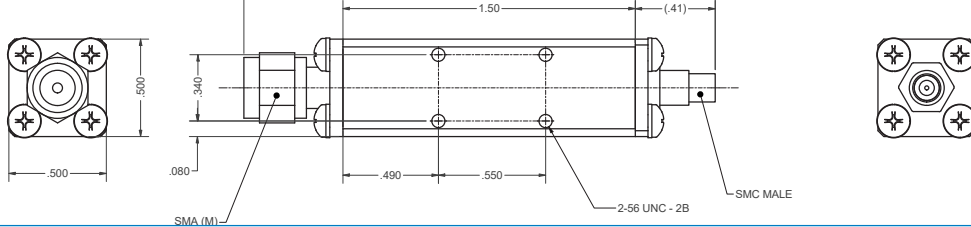
Type - F



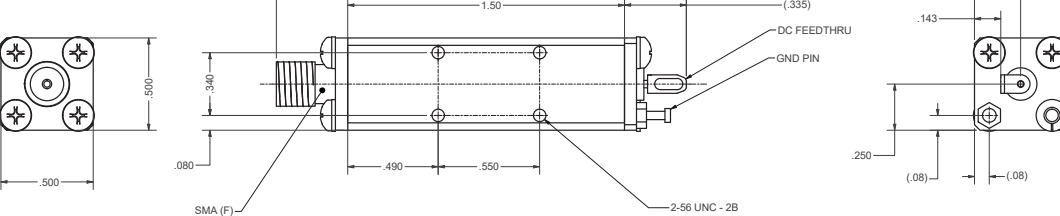
### Type - G



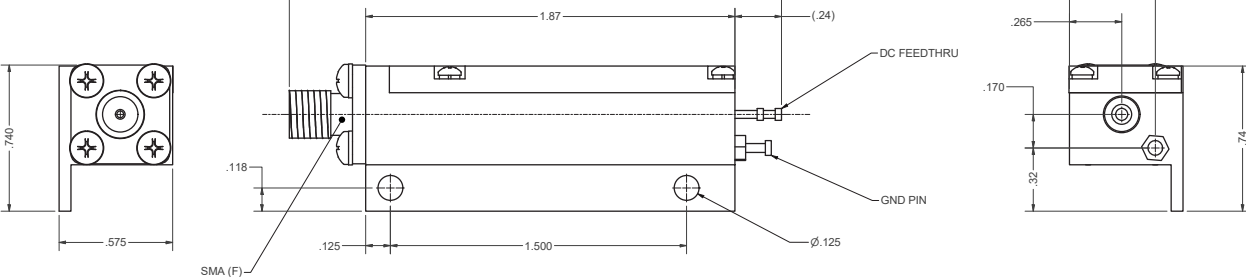
### Type - H



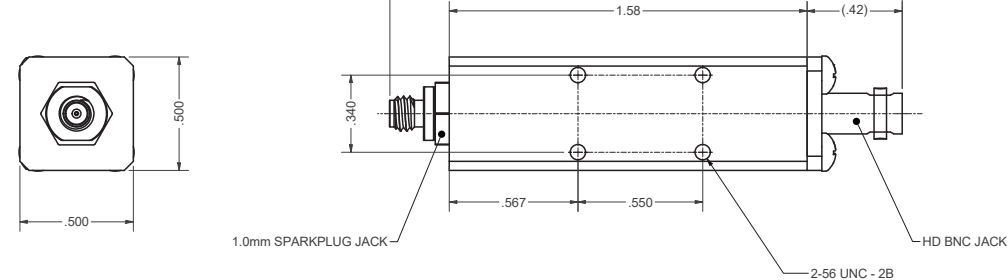
### Type - J



### Type - K



### Type - M



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