



WR-112 Standard Gain Horn Antenna Operating
From 7.05 GHz to 10 GHz With a Nominal 20 dB
Gain SMA Female Input Connector

TECHNICAL DATA SHEET

PE9858/SF-20

Configuration

Frequency Range	7.05 to 10 GHz
Polarization	Linear
Interface 1	WR-112
Interface 2	SMA Female

Electrical Specifications (Values at 25°C, sea level)

Description	Minimum	Typical	Maximum	Units
Impedance		50		Ohms
Nominal Gain	20			dB
Input VSWR			1.35:1	

Mechanical Specifications

Size

Length	12.27 in [311.66 mm]
Width	5.1 in [129.54 mm]
Height	3.77 in [95.76 mm]
Weight	0.75 lbs [340.19 g]

Compliance Certifications (visit www.Pasternack.com for current document)

RoHS Compliant

Plotted and Other Data

2 Dimensional OML Drawing PE9858/SF

Notes:

- Values at 25 °C, sea level

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-112 Standard Gain Horn Antenna Operating From 7.05 GHz to 10 GHz With a Nominal 20 dB Gain SMA Female Input Connector PE9858/SF-20](#)





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WR-112 Standard Gain Horn Antenna Operating From 7.05 GHz to 10 GHz With a Nominal 20 dB Gain SMA Female Input Connector from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

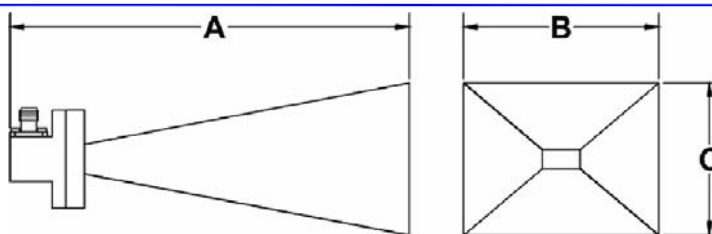
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-112 Standard Gain Horn Antenna Operating From 7.05 GHz to 10 GHz With a Nominal 20 dB Gain SMA Female Input Connector PE9858/SF-20](http://www.pasternack.com/wr-112-standard-gain-horn-antenna-20-db-sma-pe9858-sf-20-p.aspx)

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The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

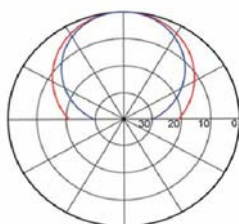
PE9858/SF-20 CAD Drawing

WR-112 Standard Gain Horn Antenna Operating From 7.05 GHz to 10 GHz With a Nominal 20 dB Gain SMA Female Input Connector

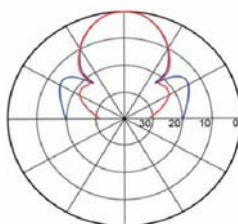


Specifications ⁽¹⁾ & Ordering Information

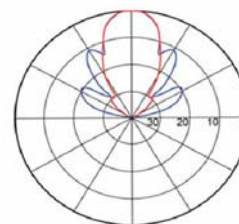
SMA/2.92mm CONNECTOR MODEL NO.	Description	WAVEGUIDE SIZE	FREQUENCY RANGE (DC TO GHz)	GAIN	3 dB Width		Dimensions		
					E-Plane	H-Plane	A	B	C
PE9850/2F-10 PE9850/2F-15 PE9850/2F-20	WR28 Standard Gain Horn with 2.92mm Female Connector 10, 15 & 20 dB Gain	WR28	26.50-40.00	10 dB	54.2°	54.4°	1.56	0.50	0.40
				15 dB	32.1°	31.3°	2.44	0.84	0.62
				20 dB	16.7°	18.3°	3.69	1.45	1.10
PE9851/2F-10 PE9851/2F-15 PE9851/2F-20	WR34 Standard Gain Horn with 2.92mm Female Connector 10, 15 & 20 dB Gain	WR34	22.00-33.00	10 dB	54.1°	53.2°	1.68	0.65	0.50
				15 dB	23.1°	40.8°	2.67	1.07	0.82
				20 dB	17.0°	17.4°	4.13	1.86	1.40
PE9852/2F-10 PE9852/2F-15 PE9852/2F-20	WR42 Standard Gain Horn with 2.92mm Female Connector 10, 15 & 20 dB Gain	WR42	18.00-26.50	10 dB	58.0°	57.0°	1.94	0.69	0.52
				15 dB	31.3°	31.5°	3.06	1.22	0.92
				20 dB	17.5°	17.8°	4.72	2.26	1.77
PE9853/SF-10 PE9853/SF-15 PE9853/SF-20	WR51 Standard Gain Horn with SMA Female Connector 10, 15 & 20 dB Gain	WR51	15.00-22.00	10 dB	55.1°	54.2°	2.07	0.89	0.70
				15 dB	32.0°	31.8°	8.30	1.60	1.16
				20 dB	16.9°	18.0°	5.65	2.60	2.04
PE9854/SF-10 PE9854/SF-15 PE9854/SF-20	WR62 Standard Gain Horn with SMA Female Connector 10, 15 & 20 dB Gain	WR62	12.40-18.00	10 dB	55.3°	50.9°	2.00	1.15	0.82
				15 dB	30.1°	31.2°	3.48	1.88	1.47
				20 dB	18.8°	18.9°	6.80	3.00	2.24
PE9855/SF-10 PE9855/SF-15 PE9855/SF-20	WR75 Standard Gain Horn with SMA Female Connector 10, 15 & 20 dB Gain	WR75	10.00-15.00	10 dB	50.2°	49.2°	2.88	1.39	1.04
				15 dB	35.4°	28.5°	5.70	2.36	1.45
				20 dB	16.3°	17.2°	8.85	4.00	3.10
PE9856/SF-10 PE9856/SF-15 PE9856/SF-20	WR90 Standard Gain Horn with SMA Female Connector 10, 15 & 20 dB Gain	WR90	8.20-12.40	10 dB	48.5°	47.4°	2.82	1.70	1.27
				15 dB	29.3°	29.0°	6.45	2.80	2.05
				20 dB	16.1°	16.5°	11.06	5.00	3.70
PE9857/SF-10 PE9857/SF-15 PE9857/SF-20	WR102 Standard Gain Horn with SMA Female Connector 10, 15 & 20 dB Gain	WR102	7.00-11.00	10 dB	55.5°	54.1°	4.13	1.69	1.27
				15 dB	29.6°	29.3°	7.28	2.40	3.15
				20 dB	17.0°	16.7°	12.28	5.68	4.04
PE9858/SF-10 PE9858/SF-15 PE9858/SF-20	WR112 Standard Gain Horn with SMA Female Connector 10, 15 & 20 dB Gain	WR112	7.05-10.00	10 dB	56.8°	55.2°	4.02	1.75	1.30
				15 dB	32.4°	32.0°	7.79	3.05	2.25
				20 dB	19.3°	19.3°	12.27	5.10	3.77
PE9859/SF-10 PE9859/SF-15 PE9859/SF-20	WR137 Standard Gain Horn with SMA Female Connector 10, 15 & 20 dB Gain	WR137	5.85-8.20	10 dB	55.1°	54.2°	4.41	2.15	1.60
				15 dB	33.7°	33.2°	7.80	3.53	2.60
				20 dB	18.7°	18.8°	13.45	6.45	4.65
PE9860/SF-10 PE9860/SF-15 PE9860/SF-20	WR159 Standard Gain Horn with SMA Female Connector 10, 15 & 20 dB Gain	WR159	4.90-7.05	10 dB	59.8°	48.3°	6.04	2.80	1.70
				15 dB	31.3°	30.8°	9.66	4.43	3.27
				20 dB	14.3°	16.9°	13.38	10.00	7.80
PE9861/SF-10 PE9861/SF-15 PE9861/SF-20	WR187 Standard Gain Horn with SMA Female Connector 10, 15 & 20 dB Gain	WR187	3.95-5.85	10 dB	55.0°	54.1°	17.51	3.29	2.19
				15 dB	33.8°	33.3°	11.28	4.98	3.67
				20 dB	18.9°	19.2°	16.88	9.08	6.70
PE9862/SF-10 PE9862/SF-15 PE9862/SF-20	WR229 Standard Gain Horn with SMA Female Connector 10, 15 & 20 dB Gain	WR229	3.30-4.90	10 dB	58.6°	51.9°	17.98	3.71	2.73
				15 dB	32.7°	32.4°	7.05	6.63	6.00
				20 dB	17.1°	16.7°	25.63	12.40	8.75
PE9863/SF-10 PE9863/SF-15 PE9863/SF-20	WR284 Standard Gain Horn with SMA Female Connector 10, 15 & 20 dB Gain	WR284	2.60-3.95	10 dB	50.8°	54.1°	9.90	4.40	3.58
				15 dB	31.0°	30.6°	23.15	9.00	5.60
				20 dB	17.2°	16.5°	32.15	15.70	10.80
PE9864/SF-10 PE9864/SF-15 PE9864/SF-20	WR430 Standard Gain Horn with SMA Female Connector 10, 15 & 20 dB Gain	WR430	1.70-2.60	10 dB	64.8°	45.4°	14.00	8.15	4.14
				15 dB	33.1°	32.0°	26.6	11.85	8.50
				20 dB	17.3°	17.4°	44.00	22.25	16.20



— Typical Pattern, E-Plane
— Typical Pattern, H-Plane
10 dBi



— Typical Pattern, E-Plane
— Typical Pattern, H-Plane
15 dBi



— Typical Pattern, E-Plane
— Typical Pattern, H-Plane
20 dBi

(1) Pasternack reserves the right to change specifications or information without notice.
(2) All Specifications "typical"

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