

Flexible Dielectric Waveguide Set || BN 533660Cxxxx



**Technical characteristics**

Frequency range	75 to 110 GHz (W band)		
Waveguide interface aperture	R 900 per IEC 60153-2 (WR 10 per EIA-261, WM-2540 per IEEE Std 1785.1)		
Waveguide interface connector	UFC 900 per IEC 60154-2; compatible to M3922/67-010 (UG-387/U-mod) and IEEE 1785-2a type flanges		
Waveguide assembly B24129Cxxxx	C0007	C0019	C0031
Number of tubular segments	7	19	31
Length, nom.	300 mm	600 mm	900 mm
Average power rating	1 W		
Return loss, min. / typ.	16 dB / 20 dB		14 dB / 20 dB
Insertion loss, max. / typ.	1.9 dB / 1.5 dB	2.8 dB / 2.4 dB	3.7 dB / 3.3 dB
Insertion loss stability at any flexure, typ.	0.4 dB @ 75 to 80 GHz 0.2 dB @ 80 to 110 GHz	0.8 dB @ 75 to 80 GHz 0.4 dB @ 80 to 85 GHz 0.2 dB @ 85 to 110 GHz	0.8 dB @ 75 to 80 GHz 0.6 dB @ 80 to 85 GHz 0.4 dB @ 85 to 90 GHz 0.2 dB @ 90 to 110 GHz
Transmission phase stability at any flexure, typ.	10 deg. (tbc)		
Bending radius, min. (limited by jacket)	75 mm		
Twisting angle, max. (limited by jacket)	±40°	±100°	±160°
Applicable tensile force, max.	20 N		
Case materials / surface finishes	waveguide transitions: copper alloy / gold plated protective jacket: black polymer		
IP protection level	IP50 per EN 60529 (if properly installed)		
Weight, approx.	0.25 kg	0.35 kg	0.45 kg
Marking	laser engraving on waveguide transitions		
Life, min.	100 000 flex cycles		

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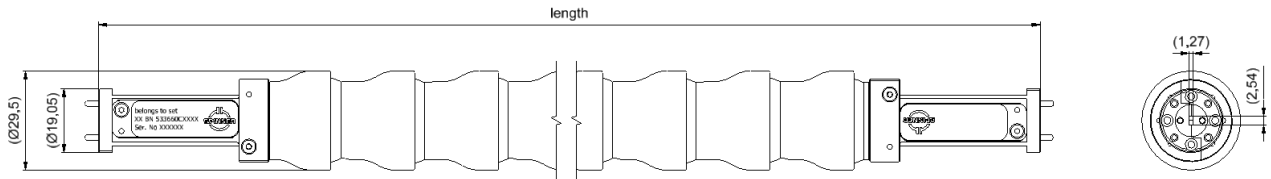
**Environmental conditions**

<b>Operation</b>	
Ambient temperature range	0 to +30°C
Relative humidity, max.	95% (non-condensing)
<b>Storage</b>	
Ambient temperature range	-55 to +70°C
Relative humidity, max.	95% (non-condensing)

**Scope of delivery and accessories**

Scope of delivery	dielectric waveguide assemblies (B24129Cxxxx) as per table below storage case (A75537) product documentation ball end hexagon screwdriver 5/64" (A75573) socket-head cap screws 4-40 UNC (A61786) protective caps (A62935)
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**Outline (all dimensions in millimeter)**



**Available set configurations, e.g.**

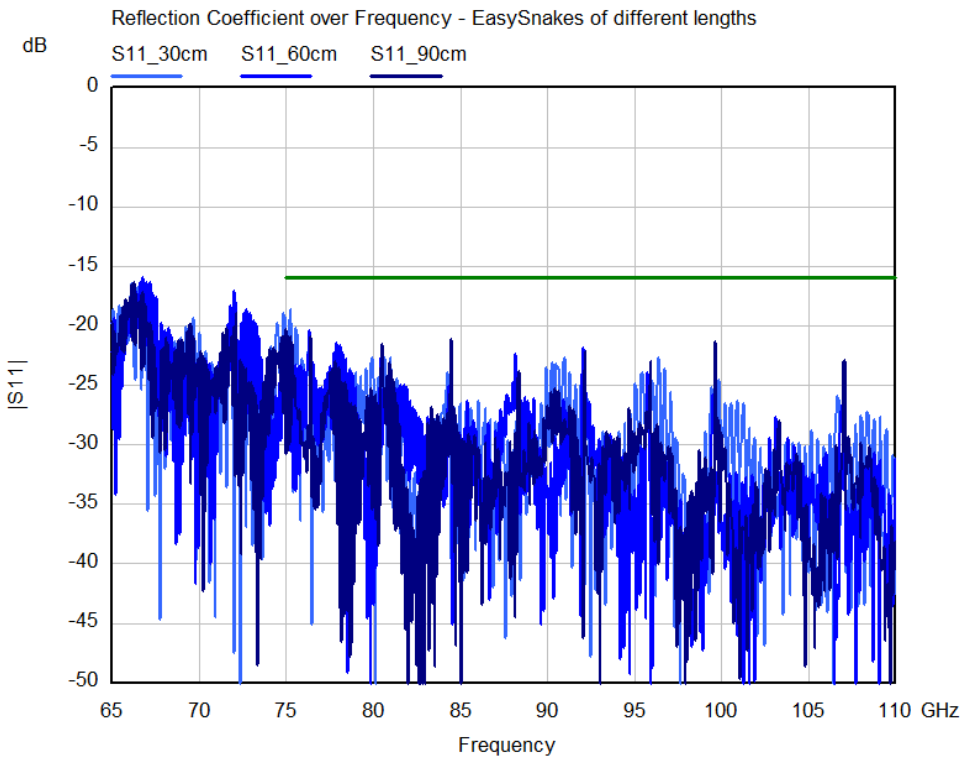
Waveguide length, nominal	Qty. of waveguides assemblies per set	Order number
300 mm	1	533660C0107
300 mm	2	533660C0207
600 mm	1	533660C0119
600 mm	2	533660C0219
900 mm	1	533660C0131

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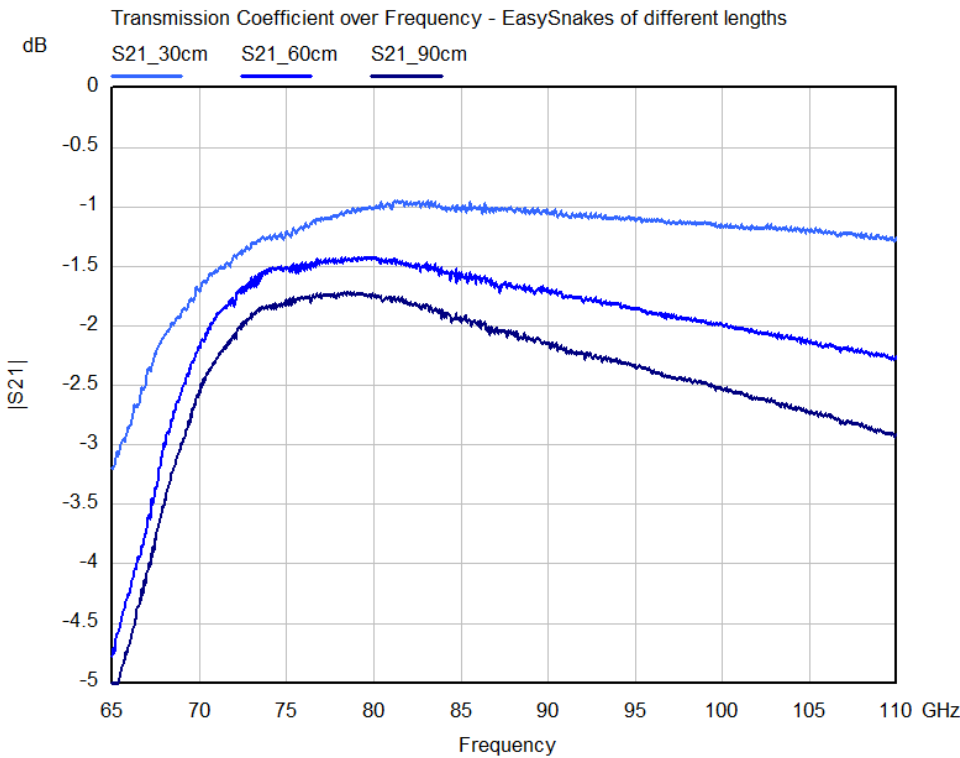
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## Typical return loss response



## Typical insertion loss response



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