

# HUBER+SUHNER® DATA SHEET

## Coaxial Cable: EZ\_47\_AL\_TP



### Description

SEMI RIGID, the formstable microwave cable

### Technical Data

#### Construction

	Material	Detail	Diameter
Centre conductor	Steel, Copper+Silver plated	Wire	0.29 mm
Dielectric	PTFE		0.93 mm
Outer conductor	Aluminum / TP	Tube, 100 %	1.19 mm

#### Electrical Data

Impedance	50	$\Omega$ +/- 2.5
Max. operating frequency	107	GHz
Capacitance	105	pF/m
Velocity of signal propagation	69.5	%
Signal delay	4.8	ns/m
Insulation resistance	$\geq 1 \times 10^8$	M $\Omega$ m
Min. screening effectiveness	>120	dB (up to 18 GHz)
Max. operating voltage	1	kV <sub>rms</sub> (at sea level)

#### Mechanical Data

Weight	0.31	kg/100 m
Min. bending radius	static	1.27 mm

#### Environmental Data

Temperature range	-55 °C... + 100 °C
Installation temperature	-20 °C... + 60 °C

### Ordering Information

Order as EZ\_47\_AL\_TP

### Additional Information

#### Remarks

(For details refer to the HUBER+SUHNER MICROWAVE CABLES AND ASSEMBLIES GENERAL CATALOGUE or contact your nearest HUBER+SUHNER partner)

### Cable group

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Rev.: G

**Matrix**                      **Attenuation** [ formula:  $(a \cdot f^{0.5} + b \cdot f)$  ] **and Power CW** [ formula:  $(p \cdot f^{0.5})$  ]

Coefficients:

a=	1.04044	b=	0.03967	f <sub>max.</sub> =	107	p <sub>at</sub> 1GHz =	32
	<b>Frequency</b>		<b>Nom. attenuation</b>		<b>Nom. attenuation</b>		<b>Max. CW power</b>
	<b>(GHz)</b>		<b>(dB / m)</b>		<b>(dB / ft)</b>		<b>(watt)</b>
			sea level 25° C ambient temperature		sea level 25° C ambient temperature		sea level 40° C ambient temperature
	5.4		2.63		0.802		14
	10.7		3.83		1.167		10
	16.1		4.81		1.466		8
	21.4		5.66		1.725		7
	26.8		6.45		1.966		6
	32.1		7.17		2.185		6
	37.5		7.86		2.396		5
	42.8		8.50		2.591		5
	48.2		9.14		2.786		5
	53.5		9.73		2.966		4
	58.9		10.32		3.145		4
	64.2		10.88		3.316		4
	69.6		11.44		3.487		4
	74.9		11.98		3.651		4
	80.3		12.51		3.813		4
	85.6		13.02		3.968		3
	91.0		13.54		4.127		3
	96.3		14.03		4.276		3
	101.7		14.53		4.429		3
	107.0		15.01		4.575		3

HUBER+SUHNER is certified according to ISO 9001 and ISO 14001

**WAIVER!**

It is exclusively in written agreements that we provide our customers with warrants and representations as to the technical specifications and/or the fitness for any particular purpose. The facts and figures contained herein are carefully compiled to the best of our knowledge, but they are intended for general informational purposes only.



**HUBER+SUHNER AG**  
**RF Industrial**  
**9100 Herisau, Switzerland**  
 Phone +41 (0)71 353 41 11  
 Fax +41 (0)71 353 45 90  
 www.hubersuhner.com

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