SUHNER® COAXIAL CABLE DATA SHEET

TYPE RG 316 /U

Single screened coaxial cable

Cable Design

	Material	Detail	Diameter
Centre conductor:	*StCuAg*	*Strand-07* (*0.18* mm)	*0.54* mm
Dielectric:	*PTFE*		*1.55* mm
1. Outer conductor:	*CuAg Braid*	*94*% coverage	*2* mm
2. Outer conductor:	*n/a n/a*		
Jacket:	*FEP*	*RAL 8015 - br*	*2.5* mm *+/-0.1*
Print:	*SUHNER SWITZERLAND RG 316 /U 50 Ohm*		

Electrical Data

Impedance:	*50*	Ω *+/-2*
Max. operating frequency:	*1*	GHz
Capacitance :	*97.2*	pF / m
Velocity of signal propagation:	*69*	%
Signal delay:	*4.86*	ns / m
Min. screening effectiveness:	> *35*	*dB (up to 1 GHz)*
Max. operating voltage:	*0.85*	kV_{rms} (at sea level)
Test voltage:	*2*	kV_{rms} (50 Hz/ 1min)
Insulation resistance:	> *10*	MΩm

General Data

Temperature range:		*-65* °C…+ *165* °C	
Weight:		*1.6*	kg / 100 m
Min. bending radius :	*static*	*15*	*mm*
	repeated (for max. 50 bendings)	*25*	mm
	dynamic	*50*	mm

Suitable Connectors

Cable group *U2 / U2*

(for details refer to the "SUHNER coaxial connector catalogue" or contact you nearest HUBER+SUHNER partner)

Notes

Order as *RG 316 /U* under article number *22510079*

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Matrix **Attenuation** **[formula : (a*f^0.5 +b*f)]** and **Power CW** **[formula : (p*/ f^0.5)]**

Coefficients:
a= 0.767 *b= 0.0892* f_{max}=.*1* $p_{at\ 1GHz}$ =*135*

Frequency (GHz)	*Nom. attenuation* (dB / m) sea level 25° C ambient temperature	*Nom. attenuation* (dB / ft) sea level 25° C ambient temperature	*Max. CW power* (watt) sea level 40° C ambient temperature
0.05	***0.176***	***0.0536***	***603.7***
0.10	***0.251***	***0.0765***	***426.9***
0.15	***0.310***	***0.0945***	***348.6***
0.20	***0.361***	***0.1100***	***301.9***
0.25	***0.406***	***0.1237***	***270.0***
0.30	***0.447***	***0.1362***	***246.5***
0.35	***0.485***	***0.1478***	***228.2***
0.40	***0.521***	***0.1588***	***213.5***
0.45	***0.555***	***0.1692***	***201.2***
0.50	***0.587***	***0.1789***	***190.9***
0.55	***0.618***	***0.1884***	***182.0***
0.60	***0.648***	***0.1975***	***174.3***
0.65	***0.676***	***0.2060***	***167.4***
0.70	***0.704***	***0.2146***	***161.4***
0.75	***0.731***	***0.2228***	***155.9***
0.80	***0.757***	***0.2307***	***150.9***
0.85	***0.783***	***0.2386***	***146.4***
0.90	***0.808***	***0.2463***	***142.3***
0.95	***0.832***	***0.2536***	***138.5***
1.00	***0.856***	***0.2609***	***135.0***

Test (following tests have been passed successfully)
Flame propagation: *IEC 332-3*

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