SUHNER® COAXIAL CABLE DATA SHEET

TYPE RG 178 B/U

Single screened coaxial cable

Cable Design

	Material	Detail	Diameter
Centre conductor:	*StCuAg*	*Strand-07* (*0.1* mm)	*0.31* mm
Dielectric:	*PTFE*		*0.83* mm
1. Outer conductor:	*CuAg Braid*	*95*% coverage	*1.33* mm
2. Outer conductor:	*n/a n/a*		
Jacket:	*FEP*	*RAL 8015 - br*	*1.8* mm *+/-0.1*
Print:	*SUHNER SWITZERLAND RG 178 B/U 50 Ohm*		
Armour H:	*n/a*		

Electrical Data

Impedance:	*50*	Ω *+/-2*
Max. operating frequency:	*1*	GHz
Capacitance :	*96.8*	pF / m
Velocity of signal propagation:	*69*	%
Signal delay:	*4.84*	ns / m
Min. screening effectiveness:	> *35*	*dB (up to 0.3 GHz)*
Max. operating voltage:	*1*	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:		*0.84*	kg / 100 m
Min. bending radius :	*static*	*10*	*mm*
	repeated (for max. 50 bendings)	*20*	mm
	dynamic	*40*	mm

Suitable Connectors

Cable group *U1 / U1*

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

Notes

Order as *RG 178 B/U* under article number *22510043*

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

Coefficients:
a= 1.408 *b= 0.2296* f_{max}=.*1* $p_{at\ 1GHz}$ = *59*

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	***0.326***	***0.0994***	***263.9***
0.10	***0.468***	***0.1426***	***186.6***
0.15	***0.580***	***0.1768***	***152.3***
0.20	***0.676***	***0.2060***	***131.9***
0.25	***0.761***	***0.2319***	***118.0***
0.30	***0.840***	***0.2560***	***107.7***
0.35	***0.913***	***0.2783***	***99.7***
0.40	***0.982***	***0.2993***	***93.3***
0.45	***1.048***	***0.3194***	***88.0***
0.50	***1.110***	***0.3383***	***83.4***
0.55	***1.170***	***0.3566***	***79.6***
0.60	***1.228***	***0.3743***	***76.2***
0.65	***1.284***	***0.3913***	***73.2***
0.70	***1.339***	***0.4081***	***70.5***
0.75	***1.392***	***0.4243***	***68.1***
0.80	***1.443***	***0.4398***	***66.0***
0.85	***1.493***	***0.4550***	***64.0***
0.90	***1.542***	***0.4700***	***62.2***
0.95	***1.590***	***0.4846***	***60.5***
1.00	***1.638***	***0.4992***	***59.0***

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

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