

Flexible RF cable RG_217_/U

Description

RG: RG type RF cables

RG217, 50 Ohm, 3 GHz, 85°C, ø13.85 mm, PVC jacket



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper	Wire	2.69 mm
Dielectric	PE (Polyethylene)		9.33 mm
Outer conductor	Copper	Braid, 96%	10.3 mm
Outer conductor	Copper	Braid, 94 %	11.2 mm
Jacket	PVC II (low migration)	RAL 9005 - bk	13.85 mm +/- 0.25

Print: HUBER+SUHNER RG 217/U 50 Ohm (PA no.)

Electrical Data

Impedance	50 Ω +/- 2
Operating Frequency	3 GHz
Capacitance	101 pF/m
Inductance	0.248 μH/m
Velocity of signal propagation	66 %
Signal delay	5.03 ns/m
Screening effectiveness	≥ 80 dB (up to 1 GHz)
Operating voltage	≤ 6 kV _{rms} (at sea level)
Test voltage	12 kV _{rms} (50 Hz/1 min)

Mechanical Data

Weight		30.1 kg/100 m
Min. bending radius	static	70 mm
	repeated	140 mm

Environmental Data

Temperature range	-25 °C ... +85 °C
Installation temperature	-20 °C... +60 °C
Halogen free	No
2011/65/EU (RoHS)	compliant
2006/1907/EC (REACH)	compliant

Additional Information

Ordering Information

Order as RG_217_/U

Remarks

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

Suitable Connectors

Cable group U38 9 mm / 50 Ohm

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

Coefficients:

a = 0.1469

b = 0.0549

$f_{\max} = 3$

P at 1GHz = 600

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 (W) sea level 40° C ambient temperature
0,15	0,07	0,020	1549
0,3	0,1	0,030	1095
0,45	0,12	0,038	894
0,6	0,15	0,045	775
0,75	0,17	0,051	693
0,9	0,19	0,058	632
1,05	0,21	0,063	586
1,2	0,23	0,069	548
1,35	0,24	0,075	516
1,5	0,26	0,080	490
1,65	0,28	0,085	467
1,8	0,3	0,090	447
1,95	0,31	0,095	430
2,1	0,33	0,100	414
2,25	0,34	0,105	400
2,4	0,36	0,110	387
2,55	0,37	0,114	376
2,7	0,39	0,119	365
2,85	0,4	0,123	355
3,0	0,42	0,128	346