

RG179D/RD179, 75 Ohm, 2 GHz, 200°C, ø3 mm, FEP jacket

K_02253_D-02

Properties

- Custom alternative to RG_179
- Suitable for use in applications up to 2 GHz
- Extended temperature range
- double shielded for better RF screening effectiveness
- FEP jacket



Construction			
Component	Material	Detail	Diameter
Centre conductor	Steel, Copper + Silver plated	Strand-07	0.31 mm
Dielectric	PTFE (Polytetrafluoroethylene)		1.55 mm
Outer conductor	Copper, Silver plated	Braid, 96%	2 mm
Outer conductor	Copper, Silver plated	Braid, 93%	2.5 mm
Jacket	FEP (Fluorinated ethylene propylene)	RAL 8015 - br	3 mm +/- 0.1 mm

Electrical data	
Impedance	75 Ω +/- 3 Ω
Operating frequency	$\leq$ 2 GHz
Capacitance	63 pF/m
Velocity of signal propagation	69 %
Signal delay	4.83 ns/m
Screening effectiveness	81 dB at frequency 0.01 GHz ... 2GHz
Insulation resistance	100000000 $M\Omega \cdot m$
Operating Voltage (at sea level)	$\leq$ 0.85 kVrms
Test voltage (50 Hz/1 min)	$\leq$ 1.7 kVrms

Mechanical data	
Weight	approx. 23 g/m
Static bending radius	$\geq$ 18 mm
Repeated bending radius	30 mm
Dynamic bending radius	< 45 mm

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Environmental data	
Operation temperature	-65 °C ... 200 °C
Installation temperature	-20 °C ... 60 °C
Flame propagation standard	IEC 60332-3
Fire characteristics	contains halogene

Suitable connectors	
Cable group	R8

Ordering information		
Item number	Item description	Available as assembly only
22511469	K_02253_D-02	No

Power Matrix			
Calculation: typical Attenuation [formula: $(a \cdot f^{0.5} + b \cdot f)$] and maximum Power CW [formula: $(p/f^{0.5})$]			
a coefficient typical =	0.9109	b coefficient typical =	0.0308
fmax =	2	P at 1 GHz =	120
Frequency GHz	Nom. attenuation (dB/m)	Nom. attenuation (dB/ft)	CW power (W)
	sea level 25°C ambient temperature	sea level 25°C ambient temperature	sea level 40°C ambient temperature
0.20	0.414	0.126	268
0.40	0.588	0.179	190
0.60	0.724	0.221	155
0.80	0.839	0.256	134
1.00	0.942	0.287	120
1.20	1.035	0.315	110
1.40	1.121	0.342	101
1.60	1.201	0.366	95
1.80	1.278	0.389	89
2.00	1.350	0.411	85

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DOCUMENT PIM-P1035 / Date of publication: 08.08.2024 / uncontrolled copy