

Corrugated, 50 Ohm, 12 GHz, 85°C, ø10.8 mm, PE jacket

SUCOFEEED_3/8_HF

Properties

- Low loss, low IM distortion levels
- High power capability
- Flame retardant designs available
- High shielding effectiveness



Construction			
Component	Material	Detail	Diameter
Centre conductor	Copper clad Aluminum	Wire	2.8 mm
Dielectric	SPE (Foamed Polyethylene)		7 mm
Outer conductor	Copper	Tube, corrugated, 100%	9.5 mm
Jacket	PE-LD (Low-density polyethylene)	RAL 9005 - bk	10.8 mm +/- 0.2 mm

Electrical data	
Impedance	50 Ω +/-1 Ω
Operating frequency	$\leq$ 12 GHz
Capacitance	79.9 pF/m
Inductance	0.2 μ H/m
Velocity of signal propagation	83 %
Signal delay	4 ns/m
Screening effectiveness	120dB
Insulation resistance	5000 M Ω *km
Inner conductor resistance	4.23 Ω /km
Operating Voltage (at sea level)	$\leq$ 0.9 kVrms
Test voltage (50 Hz/1 min)	$\leq$ 2 kVrms

Mechanical data	
Weight	approx. 122 g/m
Static bending radius	$\geq$ 25 mm
Repeated bending radius	50 mm (bendings, up to 15)
Tensile strength	500 N

Corrugated, 50 Ohm, 12 GHz, 85°C, ø10.8 mm, PE jacket

SUCOFEED_3/8_HF

Environmental data	
Operation temperature	-55 °C ... 85 °C
Installation temperature	-25 °C ... 60 °C
CPR class	Fca
Fire characteristics	free of halogenes, acc. standard IEC 60754-1
UV resistance	ISO 4892-2

Suitable connectors	
Cable group	M7

Ordering information		
Item number	Item description	Available as assembly only
84020856	SUCOFEED_3/8_HF	No
23007004	SUCOFEED_3/8_HF	No

Power Matrix			
Calculation: typical Attenuation [formula: (a*f^0.5 + b*f)] and maximum Power CW [formula: (p/f^0.5)]			
a coefficient typical =	0.123423	b coefficient typical =	0.00988495
fmax =	12	P at 1 GHz =	540
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
0.10	0.040	0.012	1708
0.20	0.057	0.017	1207
0.40	0.082	0.025	854
0.60	0.102	0.031	697
1.00	0.133	0.041	540
1.50	0.166	0.051	441
2.00	0.194	0.059	382
6.00	0.362	0.110	220
6.50	0.379	0.115	212
7.00	0.396	0.121	204
7.50	0.412	0.126	197
8.00	0.428	0.131	191
8.50	0.444	0.135	185
9.00	0.459	0.140	180
9.50	0.474	0.145	175
10.00	0.489	0.149	171
12.00	0.546	0.166	156

HUBER+SUHNER is certified by ISO 9001, ISO 14001, ISO 45001, IATF 16949, AS/EN 9100 and ISO/TS 22163-IRIS. Waiver: Facts and figures herein are for information only and do not represent any warranty of any kind.
DOCUMENT PIM-P735 / Date of publication: 08.08.2024 / uncontrolled copy