

H155 PE SSB

low-loss and ultra-flexible



H155 PE by SSB-Electronic is a thin and extremely flexible coaxial cable for the frequency range up to 6 GHz. Due to the low attenuation and the great flexibility, this cable can be used for many applications in communications and radio technology.

The inner conductor of the cable consists of 19 stranded copper wires, each with a diameter of 0.28 mm. This structure of the inner conductor enables the outstanding flexibility of the cable. The extremely low attenuation of H155 is achieved through a low-loss PE dielectric. In order to achieve good shielding attenuation, the outer conductor of the cable has two layers. At first, the aluminium-PET-aluminium foil is used, with a special, particularly tear-resistant and heat-resistant Mylar® polyester as the PET layer. A shield braiding of tinned copper wires with a coverage of 75% is applied to this foil. The cable has a PE outer jacket.

H155 PE by SSB-Electronic is suitable for numerous applications in WLAN, GPS, CB, and mobile communications, short antenna feed lines, and many other high-frequency applications.

Key features

Diameter	5.4 ± 0.2 mm
Impedance	50 ± 4 Ω
Attenuation at 1 GHz/100 m	29.60 dB
f max	6 GHz
Euroclass according to EN 50575	Fca

Characteristics

- Flame-retardant according to IEC 60332-1-2
- UV-resistant according to IEC 61196-1-212
- RoHS compliant (Directive 2011/65/EC & 2015/863/EU RoHS 3)
- REACH compliant

Technical Data

Inner conductor	stranded (Cu) copper wire
Inner conductor Ø	1.42 mm (19 × 0.28 mm)
Dielectric	foamed cellular polyethylene (PE)
Dielectric Ø	3.9 mm
Outer conductor 1	Aluminum-Mylar®Polyester-Aluminum foil
Shielding factor	100 %
Outer conductor 2	shield braiding of tinned copper wires
Shielding factor	75 %
Outer conductor Ø	4.3 mm ± 0.2 mm
Jacket	Polyethylen (PE)
Weight	41 kg/km
Min. Bending radius	5 × Ø single, 10 × Ø repeated
Temperature range	-40 to +80 °C
Pulling strength	200 N

Electrical Data at 20 °C

Capacitance (1 kHz)	80 nF/km
Velocity factor	0.80
DC-resistance inner conductor	15.4 Ω/km
DC-resistance outer conductor	17.0 Ω/km
Insulation resistance	≥ 5 GΩ*km
Test Voltage DC (wire/screen)	AC 1.0 kV
Max. voltage	2.5 kV

H155 PE SSB RG 58/U RG 213/U

Capacitance	80 pF/m	102 pF/m	101 pF/m
Velocity factor	0.80	0.66	0.66
Attenuation (dB/100m)			
10 MHz	3.20	5.00	2.00
100 MHz	9.10	17.00	7.00
500 MHz	20.00	39.00	17.00
1000 MHz	29.60	54.60	22.50
3000 MHz	56.30	118.00	58.50

Typ. Attenuation (dB/100 m at 20 °C)

10 MHz	3.20	1296 MHz	33.90
20 MHz	4.40	1500 MHz	36.80
50 MHz	6.90	1750 MHz	40.30
100 MHz	9.10	1800 MHz	40.90
144 MHz	10.55	2000 MHz	43.70
200 MHz	12.40	2400 MHz	49.10
230 MHz	13.40	3000 MHz	56.30
300 MHz	15.30	3600 MHz	62.90
400 MHz	18.00	4000 MHz	67.00
432 MHz	18.70	4800 MHz	75.10
500 MHz	20.00	5000 MHz	77.10
800 MHz	26.10	5400 MHz	80.80
1000 MHz	29.60	6000 MHz	86.50

Max. Power Handling (kW at 20 °C)

50 MHz	0.9	2400 MHz	0.10
230 MHz	0.4	3000 MHz	0.09
400 MHz	0.3	3600 MHz	0.08
800 MHz	0.2	4800 MHz	0.06
1000 MHz	0.17	5400 MHz	0.06
1750 MHz	0.12	6000 MHz	0.05

Typ. Attenuation (dB/100 m at 20 °C)

