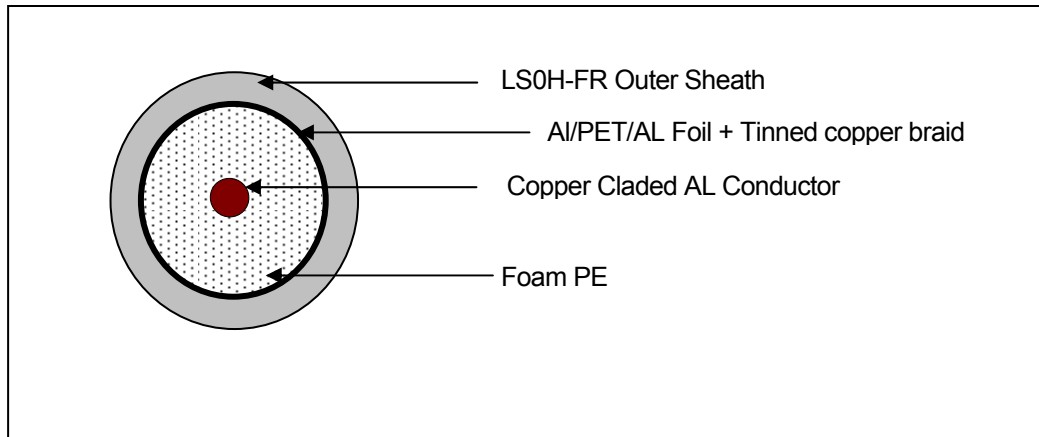


**1x1.75mm  
50 Ohm Coaxial Cable**

**icom Cable**

www.icom.com.sg



**Applications**

This cable is designed accordance to 1AC041350001.

**Cable construction**

✚ Conductor	:	Copper Claded Aluminium	∅ 1.75±0.05mm
✚ Insulation	:	Foam PE	
✚ Insulation Diameter (Max)	:	∅ 4.80 ± 0.10 mm	
✚ Colour	:	Natural.	
✚ Braiding/shielding/screen	:	AL/PET/AL Tape + Tinned copper braid, wire diameter is 0.15mm, coverage >40%	
✚ Sheath Material	:	LS0H, Fire retardant compound	
✚ Color	:	Black	
✚ Cable Dimension (Max)	:	∅ 6.85mm ± 0.15mm	
✚ Sheath marking	:	<b>icom</b> Coaxial 50 Ohm Cable 1x1.75mm P/N: 4000117 RoHS M## wk## =0000m=	

**Electrical Properties**

✚ Operating Voltage	:	0.6kV RMS
✚ Peak power rating	:	3.6kW
✚ Test voltage	:	1.2kV RMS
✚ Conductor DC resistance	:	≤ 11 Ω/km
✚ Screening conductor resistance	:	≤ 10.5 Ω/km
✚ Insulation Resistance	:	>10000 MΩ/Km
✚ Impedance	:	50 Ω ± 1.5 Ω
✚ Capacitance	:	79 pF/m
✚ Relative velocity of propagation	:	84%
✚ Dielectric constant	:	1.42
✚ Screening effectiveness	:	> 85dB from 5MHz to 1000MHz
✚ Operating Frequency	:	15GHz

## Technical Specification :- P/N: 4000117

✚ Power (max)	:	See table B
✚ Screening Attenuation (0.1 to 2GHz)	:	90 dB
✚ Return Loss(jumper 1m)	:	See table A

**Table A**

Frequency (MHz)	806~960	1700 ~ 2200	2500 ~ 2700
Return Loss (dB/m)	-26.5	-24	-23.5

**Table B**

Frequency MHz	10	30	100	300	450	900	1000	1500	1800	2000	3000
Attenuation dB/100m	2.74	4.32	6.94	11.47	14.29	20.9	21.83	27.13	29.6	31.59	39.4
Power (KW) 40°C ambient temperature, inner conductor +100°C	3.00	1.84	1.09	0.67	0.56	0.41	0.38	0.31	0.28	0.26	0.22

### Mechanical properties

✚ Maximum Bending radius	:	
○ Several Bend	:	20mm
✚ Installation tensile strength	:	600N
✚ Operating Tensile Strength	:	400 N
✚ Packaging	:	1000m
✚ Weight	:	57kg/km

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**Climate properties**

- ✚ Installation Temperature : -20°C to + 60°C
- ✚ Operating Temperature : -40°C to + 85°C
- ✚ Ageing test according to NF C 93550 §3-4-1 (168 hours at 85°C)
  - Capacitance variation : < 3%
  - Attenuation variation : < 5%
  - Shrinkage : < 3mm
  -
- ✚ UV and humidity resistance of the jacket according to the following standards
  - NF C 20 540
    - Duration : 1008 hours
    - Tensile Strength at break variation <20%
    - Elongation at break variation <15%
  - NF C 32 062-2
  - ETS 300 019-1-4 class 4.1E

**Fire and safety properties**

- ✚ Oxygen index (jacket material) 33%
- ✚ Flammability of the cable IEC 332-1
- ✚ Corrosivity IEC 754-2 pH>4.6
- ✚ Conductivity IEC 754-2  $\sigma < 20 \mu\text{S/cm}$
- ✚ Halogen acid evolution BS 6425 part 1 0
- ✚ Smoke emission ISO 5660/IEC1034 610m<sup>2</sup>/dm<sup>3</sup>

***This cable is RoHS compliant according to definitions and restrictions as specified by the European Parliament Directive 2002/95/EC***