



## Cat. 6 4x2x23/7 AWG U/UTP BBA LSZH-SHF1

<b>Batt Part No:</b>	77104
<b>Applications:</b>	Offshore installations, Maritime Environment, High bandwidth digital applications with low BER, High data rates, Indoor/Outdoor use, fixed installations, Direct burial, Ships, High speed & Light craft
<b>General Construction</b>	4 Un-shielded Twisted Pairs, a central member, cabled and overall jacketed, Bronze Braid Armour (BBA) and an outer jacket. The cable comply with Category 6 standard requirements and to SHF1 marine type cable requirements
<b>Outer Jacket Material:</b>	FR-LSZH
<b>Outer Diameter:</b>	12.0 mm nom.
<b>Weight:</b>	230 kg/km
<b>Conductor Material:</b>	Annealed Tinned Copper
<b>Conductor Size:</b>	23 AWG
<b>Conductor Construction:</b>	Stranded
<b>Insulation Material:</b>	XLPE
<b>Insulation O.D.:</b>	1.06 mm nom.
<b>Conductor unit identification:</b>	Solid/stripe
<b>Inner Jacket Material:</b>	FR-LSZH
<b>Inner Jacket Diameter nom.:</b>	8.0 mm nom
<b>Inner Jacket Colour:</b>	Grey
<b>Armouring:</b>	Braided Bronze Wire
<b>Armouring Wire Diameter:</b>	0.3 mm
<b>Armour Coverage min.:</b>	90%
<b>Total number of conductors:</b>	8
<b>Frequency Range:</b>	1 - 250 MHz
<b>Impedance:</b>	100 Ω
<b>Max. DC Resistance :</b>	73 Ω/km@20°C
<b>Max. Resistance Unbalance:</b>	2%
<b>Capacitance Unbalance:</b>	1.2 pF/m max.
<b>Velocity of Propagation:</b>	68%nom.
<b>Propagation Delay Skew:</b>	35 ns/100m max.
<b>Dielectric Strength:</b>	700 V/minute
<b>Min. Insulation Resistance :</b>	5 GΩ•km
<b>Tensile Strength - Short Term:</b>	200 N max.
<b>Min. Bend Radius:</b>	170 mm
<b>Max. Operating Temperature:</b>	+85 °C
<b>Min. Operating Temperature:</b>	-40 °C
<b>UV resistance:</b>	Yes
<b>Rodent Resistance:</b>	Yes
<b>Applicable Standards:</b>	DNV-GL certified, ABS certified, IEC 60092-359, IEC 60092-350, IEC 61156-6, ISO/IEC 11801, TIA/EIA-568, RoHS-2 2011/65/EU Flammability Rating: IEC 60332-1, IEC 60332-3-22, IEC 60754-1/2, IEC 61034-1/2

### Performance

Freq. MHz	Attenuation dB / 100m 20°C		PS NEXT Loss dB		NEXT Loss dB		RL dB		PS ELFEXT dB		ELFEXT dB	
	Typical value	Cat 6	Typical value	Cat 6	Typical value	Cat 6	Typical value	Cat 6	Typical value	Cat 6	Typical value	Cat 6
1	2.0	2.8	75	72.3	78	75.3	22	20	90	65	93	68
4	3.7	3.8	66	63.3	69	66.3	25	23	90	53	93	56
10	5.7	6.0	60	57.3	63	60.4	28	25	80	45	83	48
20	8.1	8.5	56	52.8	59	55.8	28	25	80	39	83	42
30	10.0	10.5	53	50.1	56	53.1	27	23.8	70	35.5	73	38.5
100	19.0	19.9	45	42.3	48	45.3	24	21.1	63	25	66	28
150	23.6	24.9	43	39.7	46	42.7	22	18.8	60	21.5	63	24.5
200	27.7	29.1	41	37.8	44	40.8	21	18	58	19	61	22
250	31.4	33.0	38	36.3	41	39.3	20	17.3	55	17	58	20