



## Cat. 5e 4x2x23/7 AWG U/UTP BBA LSZH-SHF1

<b>Batt Part No:</b>	77103
<b>Applications:</b>	Offshore installations, Maritime Environment, High bandwidth digital applications with low BER, Direct burial, Indoor/Outdoor use, fixed installations, Ships, High speed & Light craft
<b>General Construction</b>	4 Un-shielded Twisted Pairs, cabled and overall jacketed, Bronze Braid Armor (BBA) and an outer jacket. The cable comply with Category 5e standard requirements and to SHF1 marine type cable requirements
<b>Outer Jacket Material:</b>	FR-LSZH
<b>Outer Diameter:</b>	10.5 mm nom.
<b>Weight:</b>	170 kg/km
<b>Conductor Material:</b>	Annealed Tinned Copper
<b>Conductor Size:</b>	23 AWG
<b>Conductor Construction:</b>	Stranded
<b>Insulation Material:</b>	Solid PO
<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 thickness:</b>	1.0 mm nom.
<b>Inner Jacket Diameter nom.:</b>	6.6 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>Outer jacket thickness:</b>	1.0mm nom
<b>Frequency Range:</b>	1 - 100 MHz
<b>Impedance:</b>	100 Ω
<b>Coupling Attenuation:</b>	Type II
<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>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>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, 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, UL 1581 VW-1

### 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 5e	Typical value	Cat 5e	Typical value	Cat 5e	Typical value	Cat 5e	Typical value	Cat 5e	Typical value	Cat 5e
1	2.0	2.1	68.3	62.3	71.3	65.3	22.0	20.0	64.0	61.0	67.0	64.0
4	3.9	4.1	59.3	53.3	62.3	56.3	25.0	23.0	52.0	49.0	55.0	52.0
10	6.2	6.5	53.3	47.3	56.3	50.3	28.0	25.0	44.0	41.0	47.0	44.0
20	8.8	9.3	48.8	42.8	51.8	45.8	28.0	25.0	38.0	35.0	41.0	38.0
30	10.9	11.5	46.1	40.1	49.1	43.1	27.0	23.8	35.0	31.5	38.0	34.5
60	15.8	16.6	41.6	35.6	44.6	38.6	24.0	21.1	28.0	25.4	31.0	28.4
100	21.0	22.0	38.3	32.3	41.3	35.3	22.0	18.8	24.0	21.0	27.0	24.0