Cat 6
4x2x23/7 AWG S/FTP BBA LSZH-SHF1

BATT Part No:	77109
Applications:	Offshore installations, Maritime Environment, Data-Centres/SANs, High data rates, High bandwidth digital applications with low BER, Outdoor and direct burial installations, Indoor/Outdoor use, fixed installations, Ships, High speed & Light craft
General Construction:	Category 6, S/FTP, Armoured, SHF1, marine type cable constructed with 4 individually foil-shielded twisted pairs with stranded conductors, cabled together, inner jacket, bronze braid armour and outer jacket.
Conductor	Outer Jacket Material: FR-LSZH
Outer Diameter:	12.4 mm nom.
Weight:	245 kg/km
Conductor Material:	Annealed Tinned Copper
Conductor Size:	23/7 AWG
Conductor Construction:	Stranded
Insulation Material:	Cellular PO
Insulation O.D.:	1.48 mm nom.
Conductor unit identification:	Solid Colour
Colour Code:	Per TIA/EIA 568-B
Ind. Shield Material:	Aluminium/Polyester Foil
Ind. Shield Design:	Helically applied Aluminium foil, 100% coverage
Conductor unit lay-up:	Pairs
Overall Braid Shield:	Yes
Overall Braid Material:	Annealed Tinned Copper
Braid Coverage:	65%nom.
Overall Drain-wire Material:	Annealed Tinned Copper
Inner Jacket Material:	FR-LSZH
Inner Jacket Diameter min.:	8.6 mm. min.
Inner Jacket Colour:	Grey
Armouring:	Braided Bronze Wire
Total number of conductors:	8
Outer Jacket Colour:	Grey
Applicable Standards:	DNV-GL certified, ABS certified, IEC 60092-359, IEC 60092-350, IEC 60811-2-1, IEC 61156, ISO/IEC 11801, RoHS-2 2011/65/EU
Flammability Rating:	IEC 60332-1, IEC 60332-3-22, IEC 60754-1/2, IEC 61034-1/2
Frequency Range:	1 - 250 MHz
Impedance:	100 Ω
Transfer Impedance:	Grade 1
Coupling Attenuation:	Type II
DC Resistance:	73 Ω/km nom.
Max. Resistance Unbalance:	2%
Max. Screen Resistance:	15 Ω/Km @20°C
Capacitance Unbalance:	1.2 pF/m max.
Velocity of Propagation:	78%nom.

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Propagation Delay Skew:	25 ns/100m max.
Dielectric Strength:	700 V/minute
Dielectric Strength to Shield:	700 V/minute
Min. Insulation Resistance :	5 GΩ•km
Tensile Strength - Short Term:	240 N max.
Min. Bend Radius:	130 mm
Cold Bend:	per UL 44, per CSA C22.2 No. 38-95
Cold Impact:	per UL 44, per CSA C22.2 No.0.3
Max. Operating Temperature:	+75 °C
Min. Operating Temperature:	- 40 °C
UV resistance:	Yes
Rodent Resistance:	Yes

Electrical Properties

Freq MHz	Attenuation dB/100m 20°C	PS NEXT Loss dB		NEXT Loss dB		RL dB		PS ANEXT dB		PS ELFEXT dB		ELFEXT dB	
	Typical Value	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	87	72.3	90	75.3	22	20	70	67	85	65	88	68
4	3.5	87	63.3	90	66.3	25	23	70	67	73	53	76	56
10	5.4	87	57.3	90	60.3	30	25	70	67	65	45	68	48
20	7.6	87	52.8	90	55.8	30	25	70	67	59	39	62	42
30	9.6	87	50.1	90	53.1	27	23.8	70	67	55.4	35.4	58.4	38.4
100	17.8	80	42.3	83	45.3	24	21.1	67	62.5	45	25	48	28
150	22.2	78	39.7	81	42.7	22	18.8	66	59.8	41.5	21.5	44.5	24.5
200	25.4	78	37.8	81	40.8	21	18	65	58.0	49	19	52	22
250	28.6	75	36.3	78	39.3	20	17.3	63	56.5	37	17	40	20

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