

Category 6A F/FTP Cable - LSFROH - International

Siemon's category 6A / Class E_A 4-pair F/FTP cable supports channel performance exceeding ANSI/TIA and ISO/IEC category 6A requirements. This cable uses a 5-foil screened design consisting of 4 individual foils wrapped pairs plus an overall foil shield. When combined with our shielded Z-MAX[®] 6A connectivity, the end result is a channel capable of supporting 10GBASE-T operation over 100-meter, 4-connector topologies. In addition, the fully shielded construction ensures virtually zero alien crosstalk. This cable has been formulated to meet IEC 60332-3-25 which is a more demanding flammability specification for bundled cables.



Siemon's **PowerGuard**[®] technology with a 75°C operating temperature improves heat dissipation for reduced length de-rating and bundling requirements in remote powering applications, including PoE and Power over HDBaseT (PoH).

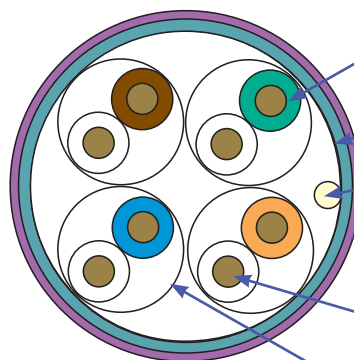


Compliance

- ISO/IEC 11801-1 Ed 1.0
- ANSI/TIA-568.2-D (Category 6A)
- IEC 61156-5 Ed 2.0 (Category 6A)
- IEC 60332-3-25, IEC 60754-2, IEC 61034
- EN 50399 Class C_{ca}S_{1a}d_{1a}1
- IEEE 802.3af (Type 1 PoE)
- IEEE 802.3at (Type 2 PoE)
- IEEE 802.3bt (Type 3 PoE)
- IEEE 802.3bt (Type 4 PoE)
- Power over HDBaseT (PoH)

Cable Construction

- Nominal Cable Diameter: 7.2mm (0.28 in.)
- Conductor Insulation: Foam PE
- Material: LSFROH
- Drain Wire: (Solid Tinned Copper)
- Aluminium Foil Overall Shield
- Conductor: 23 AWG (0.56mm) Solid Copper
- Aluminium Foil Pair Shield



Conductor Insulation

- Foam PE
1.28mm (.05 in.) ± 0.5mm

Aluminum Foil Overall Shield

Drain Wire

- Solid tinned copper

Outer Jacket

- Material - LSFROH
O.D. = 7.2mm (0.28 in.) ± 0.3mm

Conductor

- 23AWG solid copper
0.56mm (0.021 in.)

Aluminum Foil Pair Shield

Product Information

Electrical Specifications

DC Resistance	73.2Ω/Km max. @20°C
DC Resistance Unbalance	2%
Mutual Capacitance	56 nF/km (nom.) @ 1KHz
Capacitance Unbalance	<1600 pF/km
Characteristic Impedance Function Fitted (ohms)	100 ± 15% @ 100 MHz
NVP	74%
TCL	40-10 log(f) dB
Coupling Attenuation	≤55 dB
Delay Skew	20ns/100m max.

Physical Properties

LSOH	
Pulling Tension (max)	110N (25 lbf)
Bend Radius (min)	50mm (2.0 in.)
Installation Temperature	0 to 50°C (+32 to 122°F)
Operating Temperature	-20 to 75°C (-4 to 167°F)

TRANSMISSION PERFORMANCE



WORST CASE



SIEMON TYPICAL

Frequency (MHz)	Insertion Loss (dB)		NEXT (dB)		PS NEXT (dB)		ACR (dB)		PSACR (dB)		ACR-F (dB)		PSACR-F (dB)		Return Loss (dB)		Propagation Delay (ns)	
1.0	2.1	1.8	75.3	93.5	73.3	92.7	73.2	93.1	71.2	90.9	73.3	97.1	71.3	93.7	20.0	23.9	570.0	448
4.0	3.8	3.6	66.3	98.3	64.3	95.9	62.5	94.7	60.5	92.4	61.3	96.4	59.3	93.9	23.0	27.3	552.0	442
10.0	5.9	5.5	60.3	87.5	58.3	87.2	54.4	82.0	52.4	81.6	53.3	86.4	51.3	85.7	25.0	32.7	545.4	439
16.0	7.5	7.1	57.2	83.4	55.2	82.9	49.8	76.3	47.8	75.8	49.2	81.2	47.2	81.1	25.0	31.2	543.0	438
20.0	8.4	8.0	55.8	77.4	53.8	76.7	47.4	69.4	45.4	68.7	47.3	75.0	45.3	74.4	25.0	32.4	542.0	437
31.25	10.5	10.1	52.9	81.1	50.9	80.4	42.4	71.0	40.4	70.3	43.4	73.5	41.4	73.1	23.6	30.0	540.4	436
62.5	15.0	14.3	48.4	87.1	46.4	84.1	33.4	72.7	31.4	69.8	37.4	74.2	35.4	73.1	21.5	31.8	538.6	435
100.0	19.1	18.2	45.3	80.6	43.3	79.4	26.2	62.3	24.2	61.1	33.3	68.3	31.3	66.8	20.1	31.3	537.6	435
200.0	27.6	25.8	40.8	74.4	38.8	71.2	13.2	48.5	11.2	45.4	27.3	63.9	25.3	62.4	18.0	31.3	536.5	434
250.0	31.1	28.9	39.3	74.4	37.3	7.8	8.3	45.9	6.3	42.7	25.3	61.0	23.3	59.5	17.3	29.5	536.3	434
300.0	34.3	31.9	38.1	72.5	36.1	69.8	3.9	41.9	-1.9	37.8	23.8	62.0	21.8	60.3	17.3	26.2	536.1	434
400.0	40.1	37.2	36.3	68.9	34.3	65.7	-3.8	31.7	-5.8	28.4	21.3	54.6	19.3	52.3	17.3	26.2	535.8	434
500.0	45.3	41.6	34.8	65.9	32.8	64.0	-10.4	23.9	-12.4	22.1	19.3	55.9	17.3	53.8	17.3	28.0	535.6	434
550.0*	-	44.0	-	58.2	-	54.9	-	14.0	-	10.4	-	41.5	-	40.4	-	20.3	-	434
625.0*	-	46.2	-	57.6	-	56.5	-	11.2	-	9.3	-	41.5	-	39.8	-	22.6	-	434
750.0*	-	51.9	-	58.6	-	56.0	-	6.6	-	4.2	-	42.6	-	40.4	-	19.2	-	434

*Values for frequencies beyond 500 mHz are for information only.

All performance based on 100 meters (328 ft.).

Ordering Information

Part Number Description

9N6J4-A5.....LSFROH (IEC 60332-3-25), violet jacket, Class E_{ca}, D_{ca}, C_{ca},
305m (1000 ft.) reel

