

Category 5E UTP MegaLAN[®]

Tested to 400 MHz

MegaLAN is ETL verified to Category 5e.

- **25 Year Warranty***
- **20 dB Minimum ACR @ 100 MHz** – Proven support for Gigabit Ethernet / 1000BASE-T / IEEE 802.3ab, ATM up to 155 Mbps, 100 Mbps Fast Ethernet / 100BASE-T / IEEE 802.3, ANSI.X3.263 FDDI TP-PMD, Ethernet / 10BASE-T / IEEE 802.3, 4 & 16 Mbps Token Ring / IEEE 802.5, T1/E1, xDSL, ISDN, 550 MHz Broadband Video and standards under development such as ATM at 622 Mbps and 1.2 Gbps.
- **5 dB Minimum** – Improvement in Near End Crosstalk vs. standard Category 5e NEXT.
- **Meets Return Loss** – Category 5e Standard.
- **.25 ns/meter Maximum Skew** – Tightly controlled propagation delay.

- **Enhanced Performance Parameters** – All electrical characteristics proven to exceed TIA/EIA 568-B Category 5e requirements: Near End Crosstalk, Characteristic Impedance, Insertion Loss, and Delay Skew. Also exceeds TIA/EIA-568-B.2 Category 5e requirements: Power Sum NEXT, and Far End Crosstalk – ELFEXT and PS-ELFEXT.
- **Engineered for Future Applications** – More than 10 years of service and still going strong, MegaLAN has a proven track record of successful installations.
- **User Friendly** – No special stripping tools. No waiting for deliveries. No compromises. Proven Performance all the way.
- This cable and/or its manufacture are covered by US Patent No. 5,424,491.

* Warranty available with MAC and System MATE[®] programs.

Electrical Characteristics

STANDARDS:

EXCEEDS TIA/EIA-568-B.2 CAT 5e & ISO/IEC 11801:2002 CAT 5 HORIZONTAL CABLE

CONDUCTOR DCR:

8.9 Ω /100m (27.1 Ω /Mft) MAX

DCR UNBALANCE:

3% MAX

MUTUAL CAPACITANCE:

46 pF/m (14 pF/ft) NOM

CAPACITANCE UNBALANCE

PAIR/GROUND:
66 pF/100m (200 pF/Mft) MAX

CHARACTERISTIC IMPEDANCE:
100 Ω \pm 15% (1-400 MHz)

INPUT IMPEDANCE:
100 Ω \pm 15% (1-100 MHz)
100 Ω \pm 22% (>100-200 MHz)

PROPAGATION DELAY:

506 + 36/ \sqrt{f} ns/100m MAX

DELTA DELAY (SKEW):

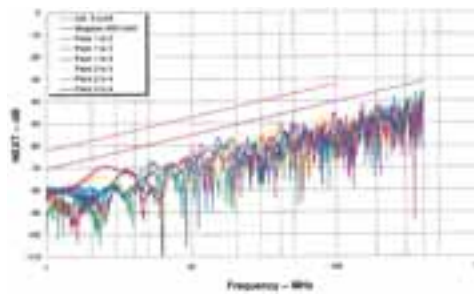
25 ns/100m MAX

NOMINAL VELOCITY

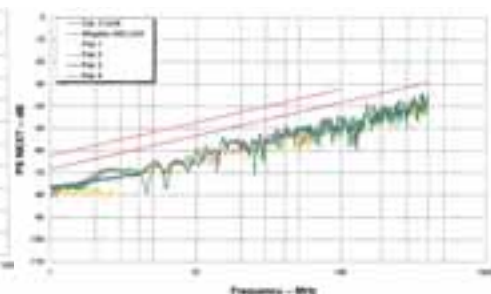
OF PROPAGATION (NVP):

PLENUM 72%
NON-PLENUM 68%

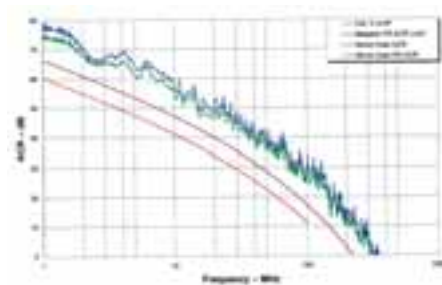
Near End Crosstalk (NEXT)



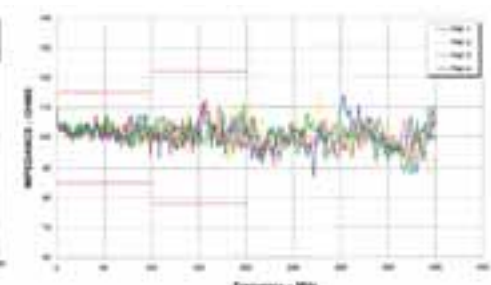
Power Sum NEXT (PS NEXT)



Worst Case ACR and Power Sum ACR



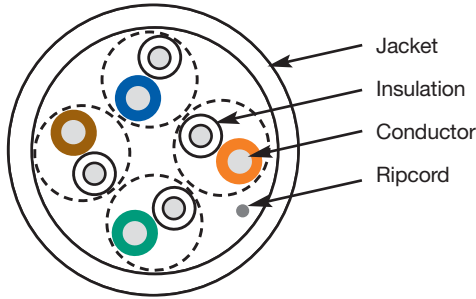
Input Impedance



Safety listed to NEC (NFPA 70)



Verified by ETL to TIA/EIA-568-B.2



Jacket Colors for 4-Pair Non-Plenum

Jacket Color	Mohawk #	Jacket Color	Mohawk #
WHITE	M55989	VIOLET	M57048
BLUE	M56167	ORANGE	M56954
PINK	M56094	RED	M56670
YELLOW	M56095	BLACK	M57129
GREEN	M56165	GRAY	M56746

Jacket Colors for 4-Pair Plenum

Jacket Color	Mohawk #	Jacket Color	Mohawk #
WHITE	M55988	VIOLET	M56878
BLUE	M56168	ORANGE	M56876
PINK	M56092	RED	M56072
YELLOW	M56093	BLACK	M56877
GREEN	M56166	GRAY	M56882

Custom colors available; please consult the factory.

FREQ (MHz)	INSERTION LOSS			NEXT		ACR	PS-NEXT		PS-ACR	ELFEXT	PS-ELFEXT	RL
	avg (dB/100m)	max (dB/mft)	max (dB/mft)	avg (dB/100m)	min (dB/100m)	min (dB/100m)	avg (dB/100m)	min (dB/100m)	min (dB/100m)	min (dB/100m)	min (dB/100m)	min (dB)
.772	1.6	1.8	5.5	82	72.0	72.2	75	70.0	68.2	-	-	-
1.0	1.8	2.0	6.2	80	70.3	70.3	73	68.3	66.3	67.8	64.8	20.0
4.0	3.6	4.0	12.2	70	61.3	59.3	63	59.3	55.3	55.8	52.8	23.0
8.0	5.2	5.7	17.4	66	56.8	53.1	59	54.8	49.1	49.7	46.7	24.5
10.0	5.8	6.4	19.4	64	55.3	50.9	58	53.3	46.9	47.8	44.8	25.0
16.0	7.3	8.1	24.7	62	52.2	46.1	56	50.2	42.1	43.7	40.7	25.0
20.0	8.3	9.1	27.7	60	50.8	43.7	54	48.8	39.7	41.8	38.8	25.0
25.0	9.3	10.2	31.0	59	49.3	41.1	52	47.3	37.1	39.8	36.8	24.3
31.25	10.4	11.4	34.8	58	47.9	38.5	51	45.9	34.5	37.9	34.9	23.6
62.5	15.1	16.4	50	54	43.4	29.0	47	41.4	25.0	31.9	28.9	21.5
100.0	19.6	21.0	64	50	40.3	21.3	43	38.3	17.3	27.8	24.8	20.1
155.0	25.0	26.6	81	48	37.4	12.9	41	35.4	8.9	24.0	21.0	18.8
200.0	28.8	30.5	93	46	35.8	7.3	40	33.8	3.3	21.8	18.8	18.0
250.0	32.8	34.4	105	45	34.3	1.9	38	32.3	-	19.8	16.8	17.3
300.0	36.5	38.0	116	44	33.1	-	37	31.1	-	18.3	15.3	16.8
350.0	40.0	41.4	126	43	32.1	-	36	30.1	-	16.9	13.9	16.3
400.0	43.2	44.6	136	42	31.3	-	35	29.3	-	-	-	15.9

Values above 250 MHz are for engineering information only.

Mohawk Part No.	Cable Type	Dielectric Type	Jacket Type Diameter inch mm	Weight lbs/M' kg/km	Listings
M55989 Non-Plenum	4 PAIR 24 AWG UTP	Thermoplastic	White PVC .190 4.83	20 30	C(ETL)US CMR
M55988 Plenum	4 PAIR 24 AWG UTP	Dual Insulation** FEP on all 4 pairs	White ThermoPlen®* .190 4.83	24 36	C(ETL)US CMP
M57113 Plenum Plus®	4 PAIR 24 AWG UTP	FEP	White Smokeguard®† FP Rated for 125° C .175 4.45	26 39	UL, CMP Limited Combustible c(UL) CMP

*Plenum rated Thermoplastic. **US Patent No. 5,563,377. †Smokeguard is a registered trademark of AlphaGary. For pair colors see chart A on page 64.

Packaging Options

Put-Up	Package	Number Per Pallet	Pallet Size
1000 Ft.	12" Reels	60	38" x 48"
1000 Ft.	Boxes (13 7/8"W x 10 1/4"D x 12 1/2"H)	36	44" x 44"
1000 Ft.	Reel in a Box (11 7/8"W x 11 3/8"D x 11 7/8"H)	36	38" x 48"



Above part numbers are for reels only. Add "B" to end of Mohawk # for boxes, or "RB" for Reel-in-a-box packaging.

Bulk put-ups available upon request; please consult the factory.

