

LAN-Trak OSP Category 5e

25 Pair #24 AWG ScTP Category 5e Outdoor Cable

PART # M58527

APPLICATIONS

10BASE-T (ETHERNET), 100BASE-T (FAST ETHERNET), AND 1000BASE-T (GIGABIT ETHERNET), FDDI TP-PMD, IEEE 802.5 4 AND 16 Mbps TOKEN RING, ATM UP TO 155 Mbps AND STANDARDS UNDER DEVELOPMENT SUCH AS ATM AT 622 Mbps.

CONSTRUCTION

PRIMARIES: CONDUCTOR: 24 AWG (.5 mm) SOLID BARE COPPER
INSULATION: THERMOPLASTIC POLYOLEFIN

PAIR ASSEMBLY: 2 PRIMARIES TWISTED IN VARIED LAYS

CABLE ASSEMBLY: 25 PAIRS CABLED TOGETHER

BINDER: OVERALL OPEN BINDER

INNER JACKET: MATERIAL: MEDIUM DENSITY POLYETHYLENE
NOMINAL WALL: .040" (1.0 mm)
NOMINAL DIAMETER: .510" (12.95 mm)
COLOR: BLACK

SHIELD: CORRUGATED ALUMINUM TAPE .008" (.20 mm)

OUTER JACKET: MATERIAL: MEDIUM DENSITY POLYETHYLENE
NOMINAL WALL: .060" (1.5 mm)
NOMINAL DIAMETER: .730" (18.54 mm)
COLOR: BLACK

PRINT: MOHAWK 25PR 24 AWG CAT 5E -- M58527
(W/SEQUENTIAL FOOTAGE MARKERS)

NOTE: CABLE FLOODED FOR MOISTURE PROTECTION

PHYSICAL CHARACTERISTICS

CABLE WEIGHT: 300 lbs/1000ft (446 kg/km)

BEND RADIUS: 11.0" (279 mm) MIN (15 x CABLE OD)

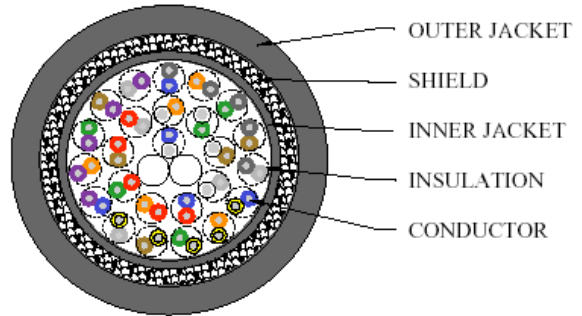
PULLING TENSION: 165 lbf (750 N) MAX

OPERATING TEMP.: -40°C to +60°C (-40°F to +140°F)

STORAGE TEMP.: -40°C to +75°C (-40°F to +167°F)

INSTALLATION TEMP.: -20°C to +60°C (-4°F to +140°F)

*THE INSTALLATION TEMPERATURE REFERS TO THE TEMPERATURE OF THE CABLE WHILE BEING INSTALLED OR PULLED.



ELECTRICAL CHARACTERISTICS

STANDARDS: TIA/EIA 568-B.2 CAT 5e BACKBONE CABLE, MEETING POWERSUM NEXT, ANSI/ICEA S-99-689-1997

VOLTAGE RATING: 300 VOLTS

CONDUCTOR DCR: 938 Ω /100m (28.6 Ω /Mft) MAX

CAPACITANCE: 51 pF/m (15.7 pF/ft) NOM

CAPACITANCE UNBALANCE PAIR/GROUND: 330 pF/100m (1000 pF/Mft) MAX

CHARACTERISTIC IMPEDANCE: 100 $\Omega \pm 15\%$ (1-100 MHz)

RETURN LOSS (RL): 20 + 5 $\log_{10}(f)$ dB MIN (1-10 MHz)
25 dB MIN (>10-20 MHz)
25 - 7 $\log_{10}(f/20)$ dB MIN (>20 MHz)

INSERTION LOSS: 1.967 $f + .023 f + \frac{.050}{f}$ dB/100m MAX

POWER SUM NEAR END CROSSTALK (PS-NEXT): 32.3 - 15 $\log_{10}(f/100)$ dB/100m MIN

POWERSUM EQUAL LEVEL FAR END CROSSTALK (PS-ELFEXT): 20.8 - 20 $\log_{10}(f/100)$ dB/100m MIN

PROPAGATION DELAY: 534 + 36 / f ns/100m MAX

DELTA DELAY (SKEW): 45 ns/100m MAX

NOMINAL VELOCITY OF PROPAGATION (NVP): 65%

WHERE f = FREQUENCY IN MHz from .772 to 100 MHz.

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FREQ (MHz)	INSERTION LOSS			PS-NEXT		PS-ACR*	PS-ELFEXT	RL
	(dB/100m)	(dB/100m)	(dB/mft)	(dB/100m)	(dB/100m)	(dB/100m)	(dB/100m)	(dB)
	avg	max	max	avg	min	min	min	min
.772	1.5	1.8	5.5	70	64.0	62.2	-	-
1.0	1.9	2.0	6.3	68	62.3	60.3	60.8	20.0
4.0	3.8	4.1	13	57	53.3	49.2	48.7	23.0
8.0	5.4	5.8	18	54	48.8	43.0	42.7	24.5
10.0	6.1	6.5	20	52	47.3	40.8	40.8	25.0
16.0	7.8	8.2	25	50	44.3	36.1	36.7	25.0
20.0	8.8	9.3	28	48	42.8	33.5	34.7	25.0
25.0	9.9	10.4	32	47	41.3	30.9	32.8	24.3
31.25	11.1	11.7	36	46	39.9	28.2	30.9	23.6
62.5	16.0	17.0	52	42	35.4	18.4	24.8	21.5
100.0	20.5	22.0	67	38	32.3	10.3	20.8	20.1

*ACR - ATTENUATION TO CROSSTALK RATIO

Mohawk reserves the right to change specification in the interest of product enhancement.

MOHAWK
Cabling Excellence for Open Architecture

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