



REMEE PN: RMMS5AE350+1023

09/09/09
Rev.1

1.0 Cat5e350 Construction Details:

No. 24 AWG copper conductor insulated with polyethylene. Two colored mated insulated conductors twisted together to form a pair and four pairs assembled to form a core.

Color Code:

Pair	Primary 1	Primary 2
1	White/Blue	Blue
2	White/Orange	Orange
3	White/Green	Green
4	White/Brown	Brown

Jacket colors: Per customer requirement

Standards:

ANSI/TIA/EIA 568B.2 Category 5e
Swept tested to 350 MHz

National Electric Code – Article 800

Applications:

Supports all category 5 applications including Ethernet 100BASE-TX, 100BASE-VG and 155 ATM. Particularly suited for high bandwidth applications such as 622 ATM, Wideband, and Ethernet 1000BASE-T.

Codes and Listings:

UL 1581: CM rating
ETL Electrically Verified to ANSI/TIA/EIA 568B.2 Category 5e
C(ETL)US

Environmental Characteristics:

Temperature Rating:
- Installation: 0°C to 50°C
- Operation: -10°C to 60°C
Maximum installing tension: 25 lbf
Minimum bending radius: 1.0 inch
Nominal cable weight: 22 lb/1000 feet
Nominal cable diameter: 0.185 inch

Electrical Parameters:

Mutual Capacitance: 14 pF/ft nominal
Capacitance Unbalance: 330 pF/ft maximum
Velocity of Propagation: 70% (nonplenum)

Max. Conductor D.C.R.: 28.6 ohm/1000'
Max. DCR Unbalance: 3%
Max. Delay Skew: 18 ns/100m
Characteristic Impedance:
from 0.772 – 100 MHz 100 ± 15%
from 100 MHz – 200 MHz 100 ± 22%
from 200 MHz – 350 MHz 100 ± 32%

Electrical Characteristics:

Frequency	SRL	Return Loss	Attenuation	NEXT	PS-NEXT	ELFEXT	PS-ELFEXT
	dB	dB	dB(100m)	dB	dB	dB	dB
MHz	Minimum	Minimum	Maximum	Minimum	Minimum	Minimum	Minimum
1	23.0	20.0	2.0	70.3	68.3	63.8	60.8
4	23.0	20.3	4.0	61.3	59.3	51.7	48.7
10	23.0	25.0	6.4	55.3	53.3	43.8	40.8
16	23.0	25.0	8.2	52.3	50.3	39.7	36.7
20	23.0	25.0	9.2	50.8	48.8	37.7	34.7
31.25	21.1	23.6	11.7	47.9	45.9	33.9	30.9
62.5	18.1	21.5	16.9	43.4	41.4	27.8	24.8
100	16.0	20.1	21.9	40.3	38.3	23.8	20.8
250	12.0	17.3	36.8	34.3	32.3	15.8	12.8
300	11.2	16.8	40.9	33.2	31.2	14.2	11.2
350	10.6	16.3	44.8	32.2	30.2	12.9	9.9

2.0 FOUR CONDUCTOR CONSTRUCTION DETAILS

- 2.1 MECHANICAL
- 2.2 Conductor: 16awg 65 strand bare copper
- 2.3 Insulation: PVC.
- 2.4 Insulation thickness: 0.012 in., nominal.
- 2.5 Color: Black, White, Green, Red

3.0 OVERALL CONSTRUCTION

- 3.1 5ae350core and four conductor group are each pulled in parallel at extrusion in a siamese construction
- 3.2 Jacket: PVC.
- 3.3 Jacket thickness: 0.025 in., nominal.
- 3.4 Color: Per customer requirement
- 3.5 Overall O.D.: Minor over 5ae: 0.220 in., nominal.
Minor over 4c16: 0.260 in., nominal
Major: 0.505 in., nominal

4.0 PREPARATION FOR DELIVERY

The cables shall be packaged to preclude the inducement of damage due to handling and transportation, and shall be in accordance with the best commercial practices available. Shipping containers shall be constructed as to eliminate any possible damage to the cables due to shipment.