



# PRODUCT DATA SHEET

Controlled Document – Engineering Drive

1530 Shields Drive  
Waukegan, IL 60085  
Toll-Free: (800) 323-9355  
Fax: (847) 689-1192

**PART NUMBER: I99995 CAT 6 250 CMR**

**Pg.1 of 3**

**DESCRIPTION:** 4PR 23 AWG UTP CATEGORY 6 250MHz. SOLID BC CONDUCTORS  
PREMISE COMMUNICATION CABLE; 75C 300V RISER RATED; CMR

**CONSTRUCTION:** 23 AWG SOLID BARE COPPER; 4 UNSHIELDED TWISTED PAIRS

**INSULATION:** HIGH DENSITY POLYETHYLENE (0.0394" Nom. Diameter over Insulation)

**COLOR CODE:** BLUE & WHITE/BLUE STRIPE; ORANGE & WHITE/ORANGE STRIPE;  
GREEN & WHITE/GREEN STRIPE; BROWN & WHITE/BROWN STRIPE

**SHIELD/DRAIN:** UNSHIELDED (UTP)

**ASSEMBLY:** 4 PAIRS INDIVIDUALLY TWISTED, CABLED; UNSHIELDED; AND JACKETED

**JACKET:** PVC

**DIAMETER:** 0.213" Nominal

**CABLE WT:** 24 Lbs/1000 Ft Approx (Net Weight)

**PRINT LEGEND:** 6R - CAT 6 SOUTHWIRE® TAPPAN™ I99995 (UL E# PLANT ID) 23AWG 4PR UTP  
TYPE CMR 75C C(UL)US LISTED SUN RES --- UL VERIFIED TO TIA-568.C.2  
CATEGORY 6 RoHS-2 COMPLIANT (Date & Lot Info) (Sequential Footage Marking)

**NEC:** CMR  
FOR PLENUM RATED VERSION GO TO SPEC. NO. I99993

**COMPLIANCE:** UL 444 CMR by (UL) / NEC ARTICLE 800 / RoHS-2

**FLAME TEST:** UL 1666

**TEMP/VOLTAGE:** 75C UL / 300V (Storage: -40C/+75C - Installation: 0C/+50C - Amb. Opr. -20C/+60C)

## PRODUCT ELECTRICAL CHARACTERISTICS:

**CAPACITANCE:** 17 pF/Ft (56 pF/m) Nominal

**CAP. UNBALANCE:** 3.3 pF/m

**VEL OF PROP:** 68%

**DELAY SKEW:** 45 ns/100m Maximum

**PROP. DELAY:** 545ns/100m Maximum Propagation Delay

**IMPEDANCE:** 100 OHMS +/- 15%

**RESISTANCE:** 9.38 OHMS D.C. PER 100m @ 68 DEG. F

Complies with EU Dir. 2011/65/EU (RoHS-2).

The customer will accept all factory lengths and +/- 10 percent of total order requested.

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**PRODUCT ELECTRICAL CHARACTERISTICS (Cont.)**

Freq. (MHz)	Attenuation (dB/100m)		NEXT (dB/100m)		ACR (dB/100m)		PSNEXT (dB/100m)		PSACR (dB/100m)		ACRF (dB/100m)		PS ACRF (dB/100m)		RL (dB)	
	Std.	Avg.	Std.	Avg.	"Std"	Avg.	Min.	Avg.	"Std"	Avg.	Std.	Avg.	Min.	Avg.	Min.	Avg.
1	2	1.9	74.3	82	72.3	80.1	72.3	80	70.3	78.1	67.8	76	64.8	75	20.0	28
4	3.8	3.7	65.1	75	61.3	71.3	63.1	73	59.3	69.3	55.5	64	52.5	63	23.1	34
8	5.3	5.1	60.9	70	55.6	64.9	58.9	68	53.6	62.9	49.9	59	46.9	58	24.5	35
10	6.1	5.9	59.1	69	53.0	63.1	57.1	67	51	61.1	47.5	56	44.5	55	25.0	35
16	7.5	7.4	56.3	67	48.8	59.6	54.3	64	46.8	56.6	43.7	53	40.7	52	25.0	34
20	8.5	8.4	54.7	66	46.2	57.6	52.7	63	44.2	54.6	41.6	51	38.6	50	25.0	35
25	9.6	9.4	53.2	63	43.6	53.6	51.2	61	41.6	51.6	39.7	49	36.7	48	24.3	33
31.25	10.7	10.6	51.8	62	41.1	51.4	49.8	60	39.1	49.4	37.8	48	34.8	47	23.6	32
62.5	15.4	15.2	47.3	58	31.9	42.8	45.3	56	29.9	40.8	31.8	41	28.8	40	21.5	29
100	19.8	19.5	44.3	55	24.5	35.5	42.3	53	22.5	33.5	27.8	37	24.8	36	20.1	28
200	29.0	28.0	39.8	50	10.8	22.0	37.8	48	8.8	20.0	21.8	30	18.8	29	18.0	25
250	32.8	31.6	38.3	48	5.5	16.4	36.3	46	3.5	14.4	19.8	27	16.8	26	17.3	24
300	--	34.8	--	47	--	12.2	--	45	--	10.2	--	25	--	23	--	24
400	--	40.7	--	42	--	1.3	--	40	--	(0.7)	--	19	--	18	--	23

Attenuation:	Std. is a TIA 568C.2 Maximum (also called "Insertion Loss")	Lower is better.
NEXT:	Std. is a TIA 568C.2 Minimum. (Near End Crosstalk)	Higher is better.
ACR:	NEXT minus Attenuation ; ("Attenuation to Crosstalk Ratio")	Higher is better.
PSNEXT:	Std. is a TIA 568C.2 Minimum. (Power Sum Near End Crosstalk)	Higher is better.
PSACR:	PSNEXT minus Attenuation ; ("Attenuation to PSNEXT Ratio")	Higher is better.
ACRF:	Std. is a TIA 568C.2 Minimum. (Attenuation Crosstalk Ratio at Far End)	Higher is better.
PSACRF:	Std. is a TIA 568C.2 Minimum. (Power Sum Atten.' to Crosstalk Ratio)	Higher is better.
RL:	Std. is a TIA 568C.2 Minimum. (Return Loss)	Higher is better.

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**COLORS and PACKAGES**

Description	Part Number*	Jacket Color	Pkg Type	Pkg Length
CAT 6 250 23/4P Be CMR 1000PB	I99995-2B	Blue	REELEX	1000
CAT 6 250 23/4P Be CMR 1000RB	I99995-2H	Blue	RIBS	1000
CAT 6 250 23/4P We CMR 1000PB	I99995-3B	White	REELEX	1000
CAT 6 250 23/4P We CMR 1000RB	I99995-3H	White	RIBS	1000
CAT 6 250 23/4P Yw CMR 1000PB	I99995-10B	Yellow	REELEX	1000
CAT 6 250 23/4P Yw CMR 1000RB	I99995-10H	Yellow	RIBS	1000
CAT 6 250 23/4P Gy CMR 1000PB	I99995-1B	Gray	REELEX	1000
CAT 6 250 23/4P Gy CMR 1000RB	I99995-1H	Gray	RIBS	1000
CAT 6 250 23/4P Oe CMR 1000PB	I99995-11B	Orange	REELEX	1000
CAT 6 250 23/4P Oe CMR 1000RB	I99995-11H	Orange	RIBS	1000
CAT 6 250 23/4P Gn CMR 1000PB	I99995-8B	Green	REELEX	1000
CAT 6 250 23/4P Gn CMR 1000RB	I99995-8H	Green	RIBS	1000
CAT 6 250 23/4P Bk CMR 1000PB	I99995-12B	Black	REELEX	1000
CAT 6 250 23/4P Bk CMR 1000RB	I99995-12H	Black	RIBS	1000
CAT 6 250 23/4P Rd CMR 1000PB	I99995-9B	Red	REELEX	1000
CAT 6 250 23/4P Rd CMR 1000RB	I99995-9H	Red	RIBS	1000
CAT 6 250 23/4P Pk CMR 1000PB	I99995-4B	Pink	REELEX	1000
CAT 6 250 23/4P Pk CMR 1000RB	I99995-4H	Pink	RIBS	1000
CAT 6 250 23/4P Pe CMR 1000PB	I99995-13B	Purple	REELEX	1000
CAT 6 250 23/4P Pe CMR 1000RB	I99995-13H	Purple	RIBS	1000

Specification Issue Date: 1/18/16	Rev Level:	ERF:	ECN:	Designed by:
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