

# GenSPEED® 6 Category 6 Cable (23 AWG)

## Standards-Compliant Extended Frequency

### Features and Benefits

- Unique separator design engineered for consistent electrical performance
- Performance guaranteed to 350 MHz
- Improved cable temperature rating (90°C Plenum, 75°C Riser) for greater protection against increased operating temperatures
- TRU-Mark® print legend contains footage markings from 1000' to 0'
- Third-party verified for guaranteed performance
- Made in U.S.A.

### Applications

- IEEE 802.3: 1000 BASE-T, 100 BASE-TX, 10 BASE-T, PoE, PoE+
- ANSI/TIA 854: 1000 BASE-TX
- CDDI, Token Ring, ATM
- Digital Video
- Broadband and Baseband Analog Video

### Standard Compliances

- ANSI/TIA 568-C.2
- NEC/CEC Type CMR (UL 1666) for Non-Plenum
- NEC/CEC Type CMP (NFPA 262) for Plenum
- UL Listed CMP-LP (0.5A) for Plenum\*
- UL 444
- RoHS Compliant Directive 2011/65/EU
- ANSI/TIA 862 (Building Automation)
- ICEA S-116-732
- ICEA S-102-700
- ISO/IEC 11801 Ed. 2.0 (Class E)



\*0.5A is the ampacity rating of the cable, which equates to 100 watts using 50 volts over four pairs.

Data subject to change without notice.



### CONSTRUCTION

#### Conductors

- 23 AWG solid bare annealed copper

#### Insulation

- Non-Plenum: Polyolefin
- Plenum: Fluoropolymer

#### Color Code

- Pair 1: Blue-White/Blue
- Pair 2: Orange-White/Orange
- Pair 3: Green-White/Green
- Pair 4: Brown-White/Brown

#### Separator

- Divider

#### Rip Cord

- Applied longitudinally under jacket

#### Jacket

- Non-Plenum: Flame-Retardant PVC
- Plenum: Low-Smoke, Flame-Retardant PVC

### PHYSICAL DATA

	CMR (Non-Plenum)	CMP (Plenum)
Nominal Cable Diameter (in)	0.220	0.205
Nominal Cable Weight (lbs/1000 ft)	24	25
Minimum Bend Radius (in)	1.0	1.0
Maximum Pulling Force (lbs)	32	32
Temperature Rating (°C)		
Installation:	0 to +60	0 to +60
Operation:	-20 to +75	-20 to +90

### PART NUMBERS

Standard packaging: 1000' Pull-Pac® II

Jacket Color	Pull-Pac® II		Spool-Pac®		Spool	
	CMR (Non-Plenum)	CMP (Plenum)	CMR (Non-Plenum)	CMP (Plenum)	CMR (Non-Plenum)	CMP (Plenum)
Blue	7133800	7131800	7133840	7131840	7133860	7131860
White	7133801	7131801	7133841	7131841	7133861	7131861
Yellow	7133802	7131802	7133842	7131842	7133862	7131862
Gray	7133803	7131803	7133843	7131843	7133863	7131863
Red	7133804	7131804	7133844	7131844	7133864	7131864
Orange	7133805	7131805	7133845	7131845	7133865	7131865
Green	7133806	7131806	7133846	7131846	7133866	7131866
Black	7133807	7131807	7133847	7131847	7133867	7131867
Pink	7133808	7131808	7133848	7131848	7133868	7131868
Purple	7133809	7131809	7133859	7131859	7133869	7131869

Note: Bulk reels are available as a special request with a maximum allowable length of 3000 feet per reel. Minimum run and lead time may apply.

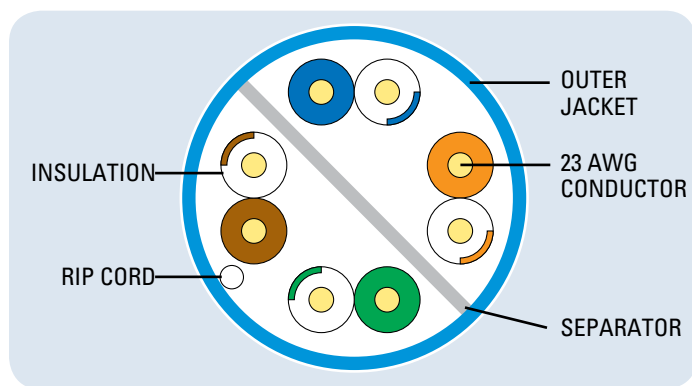
Non-stock items may be subject to minimum order quantities.

**ELECTRICAL PERFORMANCE**

Frequency MHz	PSACR* (min)	ACR* (min)	Insertion Loss (max)	PSNEXT (min)	NEXT (min)	PSACRF (min)	ACRF (min)	Return Loss (min)	TCL (min)	ELTCTL (min)
1	70.3	72.3	2.0	72.3	74.3	64.8	67.8	20.0	40.0	35.0
4	59.3	61.5	3.8	63.3	65.3	52.8	55.7	23.0	40.0	23.0
10	51.3	53.3	6.0	57.3	59.3	44.8	47.8	25.0	40.0	15.0
16	46.7	48.7	7.6	54.2	56.2	40.7	43.7	25.0	38.0	10.9
20	44.3	46.3	8.5	52.8	54.8	38.8	41.7	25.0	37.0	9.0
31.25	39.2	41.2	10.7	49.9	51.9	34.9	37.9	23.6	35.1	—
62.5	29.9	32.0	15.4	45.4	47.4	28.9	31.8	21.5	32.0	—
100	22.5	24.5	19.8	42.3	44.3	24.8	27.8	20.1	30.0	—
150	14.9	16.9	24.7	39.7	41.7	21.3	24.3	18.9	28.2	—
200	8.8	10.8	29.0	37.8	39.8	18.8	21.8	18.0	27.0	—
250	3.5	5.5	32.8	36.3	38.3	16.8	19.8	17.3	26.0	—
350	—	—	39.8	34.1	36.1	13.9	16.9	16.3	—	—
400	—	—	43.0	33.3	35.3	12.8	15.8	15.9	—	—
500	—	—	48.9	31.8	33.8	10.8	13.8	15.2	—	—

Note: Values are expressed in dB per 100 m (328 ft.) length @ 20°C. Results beyond 350 MHz are for reference only.  
 \*PSACR & ACR not specified in ANSI/TIA 568-C.2

**GenSPEED® 6 CATEGORY 6 (23 AWG) CROSS-SECTION**



**ELECTRICAL CHARACTERISTICS**

	Max.	Nom.
<b>DC Resistance</b> Ohms/100 m (328 ft) @ 20°C	9.38	7.50
<b>DC Resistance Unbalance</b> Individual Pair %	4.00	< 1
<b>Delay Skew</b> ns/100 m	45	CMP: 30 CMR: 35
<b>Nom. Velocity of Propagation</b> % Speed of Light		CMP: 70 CMR: 68
<b>Characteristic Impedance</b> Frequency (f): 1-350 MHz		Ohms 100 ± 15