

GenSPEED® 10 MTP™ Gen4 Category 6A Cable

Superior Alien Crosstalk Protection and EMI Immunity in the Industry



PART NUMBERS

Standard packaging: 1000' Lengths

Jacket Color		Spool	Pull-Pac®	Pull-Pac®
		CMR (Non-Plenum)	CMR (Non-Plenum)	CMP (Plenum)
Blue		7143849	7143839	7141839
White		7143850	7143840	7141840
Yellow		7143852	7143842	7141842
Gray		7143851	7143841	7141841
Red		7143854	7143844	7141844
Orange		7143856	7143846	7141846
Green		7143853	7143843	7141843
Black		7143858	7143848	7141848
Pink		7143857	7143847	7141847
Purple		7143855	7143845	7141845

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

PHYSICAL DATA

	CMR (Non-Plenum)	CMP (Plenum)
Nominal Cable Diameter (in)	0.250	0.260
Nominal Cable Weight (lbs/1000 ft)	32	32
Minimum Bend Radius (in)	1.06	1.0
Maximum Pulling Force (lbs)	40	40
Temperature Rating (°C)		
Installation:	0 to +60	0 to +60
Operation:	-20 to +75	-20 to +105

CONSTRUCTION:

Conductors

- 23 AWG solid bare annealed copper

Insulation

- Plenum: Fluoropolymer
- Non-Plenum: Thermoplastic

Color Code

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

Separator

- Cross-web

ANEXT Protection

- Mosaic™ variable laser cut tape

Jacket

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

Features and Benefits

- Utilizes innovative Mosaic™ Variable Laser Cut Tape to provide superior protection against alien crosstalk. Guaranteed +8 dB over TIA 568.2-E Standard for both PSANEXT & PSAACRF.
- Variable laser cut pattern delivers maximum protection against EMI noise.
- Smaller cable diameter allows for greater cable density, reducing cable management costs.
- Simplified design and improved bend radius make it easier to strip, terminate and route, reducing installation time and expense.
- UL Listed CMP-LP 0.7A with certified performance for high-power PoE applications.
- UL Listed CMR-LP 0.5A with certified performance for high-power PoE applications.
- CMP - UL verified with certified performance for 100W power over HDBaseT.
- CMP 105°C jacket rating provides greater protection against increased operating temperatures and for high-wattage applications.
- The internal separator optimizes internal pair geometry to yield superior electrical performance and maintain flexibility.
- TRU-Mark® print legend contains footage markings from 1000' to 0'
- All GenSPEED products are made in the U.S.A.

Applications

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

Standard Compliances

- ANSI/TIA 568.2-E
- NEC/CEC Type CMP (NFPA 262) for Plenum
- NEC/CEC Type CMR (UL 1666) for Riser
- UL Listed CMP-LP 0.7A*
- UL Listed CMR-LP 0.5A**
- UL 444
- UL 4299
- RoHS Compliant Directive 2011/65/EU
- ANSI/TIA 862 (Building Automation)
- ICEA S-116-732
- ISO/IEC 11801 Ed. 2.0 (Class Ex)

* 0.7A is the ampacity rating of the cable, which equals to 140 watts using 50 volts over four pairs.

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



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ELECTRICAL PERFORMANCE

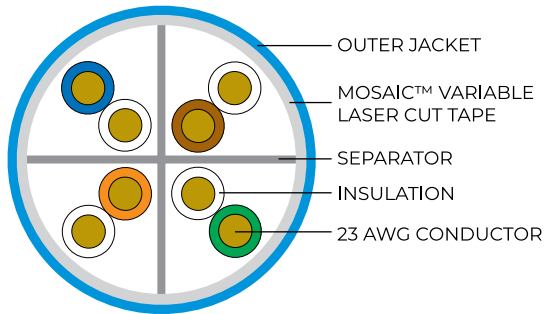
Frequency MHz	PSACR** (min)	ACR** (min)	Insertion Loss (max)	PSNEXT (min)	NEXT (min)	PSACRF (min)	ACRF (min)	Return Loss (min)	TCL (min)	PSANEXT (min)			PSAACRF (min)		
	PG Guaranteed	PG Guaranteed	TIA Guaranteed	TIA Guaranteed	TIA Guaranteed	TIA Guaranteed	TIA Guaranteed	TIA Guaranteed	TIA Guaranteed	TIA Guaranteed	PG Guaranteed	PG Typical	TIA Guaranteed	PG Guaranteed	PG Typical
1	70.2	72.2	2.1	72.3	74.3	64.8	67.8	20.0	40.0	67.0	75.0	79.0	67.0	75.0	79.0
4	59.5	61.5	3.8	63.3	65.3	52.8	55.8	23.0	40.0	67.0	75.0	79.0	66.2	74.4	78.2
10	51.4	53.4	5.9	57.3	59.3	44.8	47.8	25.0	40.0	67.0	75.0	79.0	58.2	66.2	70.2
16	46.8	48.8	7.5	54.2	56.2	40.7	43.7	25.0	38.0	67.0	75.0	79.0	54.1	62.1	66.1
20	44.4	46.4	8.4	52.8	54.8	38.8	41.8	25.0	37.0	67.0	75.0	79.0	52.2	60.2	64.2
31.25	39.4	41.4	10.5	49.9	51.9	34.9	37.9	23.6	35.1	67.0	75.0	79.0	48.3	56.3	60.3
62.5	30.4	32.4	15.0	45.4	47.4	28.9	31.9	21.5	32.0	65.6	73.6	77.6	42.3	50.3	54.3
100	23.2	25.2	19.1	42.3	44.3	24.8	27.8	20.1	30.0	62.5	70.5	74.5	38.2	46.2	50.2
150	16.0	18.0	23.7	39.7	41.7	21.3	24.3	18.9	28.2	59.9	67.9	71.9	34.7	42.7	46.7
200	10.2	12.2	27.6	37.8	39.8	18.8	21.8	18.0	27.0	58.0	66.0	70.0	32.2	40.2	44.2
250	5.2	7.2	31.1	36.3	38.3	16.8	19.8	17.3	26.0	56.5	64.5	68.5	30.2	38.2	42.2
300	0.9	2.9	34.3	35.1	37.1	15.3	18.3	16.8	25.2	55.3	63.3	67.3	28.7	36.7	40.7
400	—	—	40.1	33.3	35.3	12.8	15.8	15.9	24.0	53.5	61.5	65.5	26.2	34.2	38.2
500	—	—	45.3	31.8	33.8	10.8	13.8	15.2	23.0	52.0	60.0	64.0	24.2	32.2	36.2
600*	—	—	50.1*	30.6*	32.6*	9.2*	12.2*	14.7*	22.2*	—	50.8*	—	—	22.6*	—
700*	—	—	54.5*	29.6*	31.6*	7.9*	10.9*	14.2*	21.5*	—	49.8*	—	—	21.3*	—
750*	—	—	56.7*	29.2*	31.2*	7.3*	10.3*	14.0*	21.2*	—	49.4*	—	—	20.7*	—

Note: Values are expressed in dB per 100 m (328 ft.) length @ 20 °C.

* Values are for reference only.

** PSACR & ACR not specified in ANSI/TIA 568.2-E

CROSS-SECTION

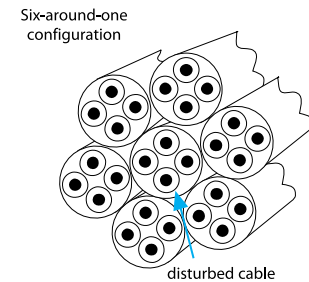


ELECTRICAL CHARACTERISTICS

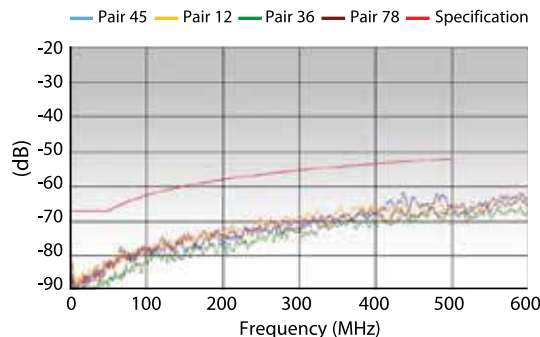
	Max.	Nom.
DC Resistance Ohms/100 m (328 ft) @ 20 °C	9.38	7.50
DC Resistance Unbalanced Individual Pair %	4.00	< 1
Delay Skew (Max) ns/100 m	45	
Nom. Velocity of Propagation % Speed of Light	CMP = 70 CMR = 68	
Characteristic Impedance Frequency (f): 1-500 MHz	Ohms 100 ± 15	

4 PAIR CABLES:

Bundles of 7 Test Results



PSANEXT



PSAACRF

