

# GenSPEED® 10 MTP™ Gen4 Category 6A Cable

Superior Alien Crosstalk Protection and EMI Immunity



## Features and Benefits

- Utilizes innovative Mosaic™ Variable Laser Cut Tape to provide superior protection against alien crosstalk. Guaranteed +8 dB over TIA 568.2-D 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-D
- 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.



## CONSTRUCTION

### Conductors

- 23 AWG solid bare annealed copper

### Separator

- Cross-web

### Insulation

- Plenum: Fluoropolymer
- Non-Plenum: Thermoplastic

### ANEXT Protection

- Mosaic™ variable laser cut tape

### Color Code

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

### Jacket

- Plenum: Low-smoke, flame-retardant PVC
- Non-Plenum: Flame-retardant PVC

## PHYSICAL DATA

	CMP (Plenum)	CMR (Non-Plenum)
Nominal Cable Diameter (in)	0.250	0.255
Nominal Cable Weight (lbs/1000 ft)	32	32
Minimum Bend Radius (in)	1.0	1.06
Maximum Pulling Force (lbs)	40	40
Temperature Rating (°C)		
Installation:	0 to +60	0 to +60
Operation:	-20 to +105	-20 to +75

## PART NUMBERS

Standard packaging: 1000' Pull-Pac or spool. Spool-Pac by special order

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

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



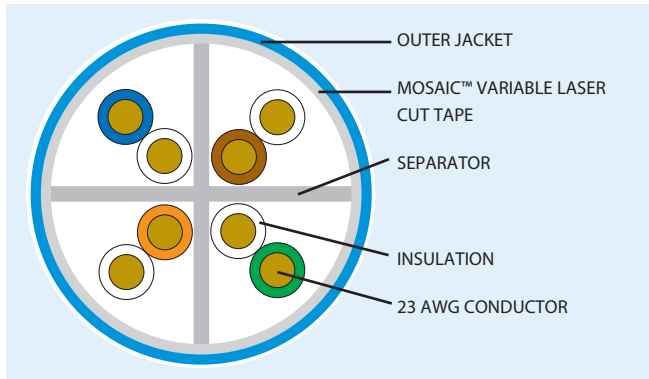
GenSPEED® 10 MTP™ Category 6A Cable

ELECTRICAL PERFORMANCE

Frequency MHz	PSACR** (min)	ACR** (min)	Insertion Loss (min)	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	TIA Guaranteed	PG Guaranteed	PG Typical	TIA Guaranteed	PG Guaranteed
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-D

CROSS-SECTION

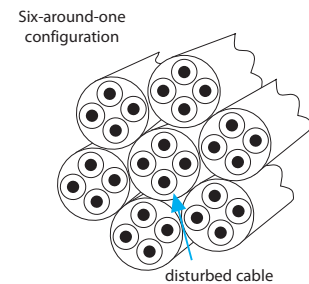


ELECTRICAL CHARACTERISTICS

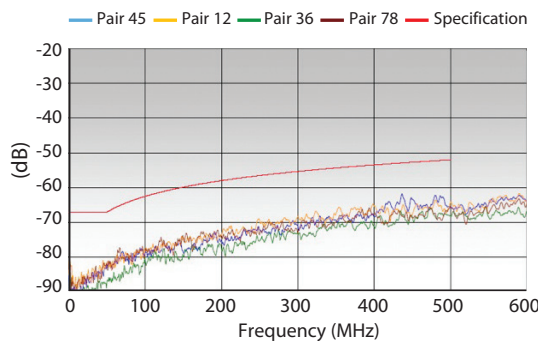
	Max.	Nom.
<b>DC Resistance</b> Ohms/100 m (328 ft) @ 20°C	9.38	7.00
<b>DC Resistance Unbalanced</b> Individual Pair %	4.00	< 1
<b>Delay Skew (Max)</b> ns/100 m	45	
<b>Nom. Velocity of Propagation</b> % Speed of Light	70	
<b>Characteristic Impedance</b> Frequency (f): 1-500 MHz	Ohms 100 ± 15	

4 PAIR CABLES:

Bundles of 7 Test Results



PSANEXT



PSAACRF

