

# GenSPEED® 10 MTP™ Gen5 Category 6A Cable

Superior Alien Crosstalk Protection and EMI Immunity in the Industry's Smallest Full Channel, Component Compliant 6A Cable

## 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.
- 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.
- TRU-Mark® print legend contains footage markings from 1000' to 0'
- All GenSPEED products are made in the U.S.A.

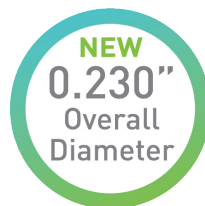
## Applications

- 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
- UL Listed CMP-LP 0.7A\*
- 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 E<sub>x</sub>)

\*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

### Insulation

- Plenum: Fluoropolymer

### Color Code

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

### ANEXT Protection:

- Mosaic™ Variable Laser Cut Tape











### Jacket

- Plenum: Low-Smoke, Flame-Retardant PVC

## PHYSICAL DATA

	CMP (Plenum)
Nominal Cable Diameter (in)	0.230
Nominal Cable Weight (lbs/1000 ft)	30
Minimum Bend Radius (in)	1
Maximum Pulling Force (lbs)	40
Temperature Rating (°C)	
Installation:	0 to +60
Operation:	-20 to +105

## PART NUMBERS

Jacket Color	CMP (Plenum)	
	Spool	Pull-Pac®
 Blue	7151849	7151839
 White	7151850	7151840
 Gray	7151851	7151841
 Yellow	7151852	7151842
 Green	7151853	7151853
 Red	7151854	7151844
 Purple	7151855	7151845
 Orange	7151856	7151846
 Pink	7151857	7151847
 Black	7151858	7151848

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



FEATURING

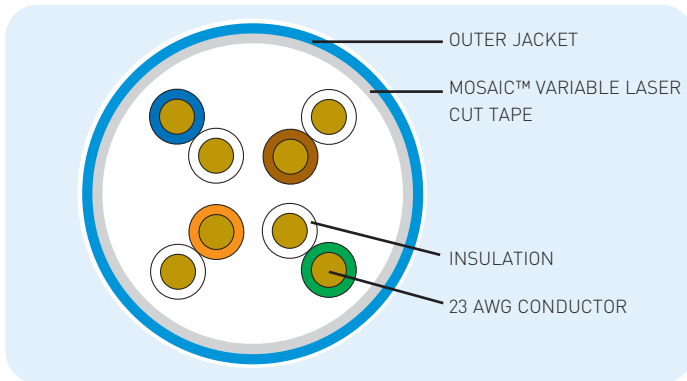


**ELECTRICAL PERFORMANCE**

Frequency MHz	PSACR*	ACR*	Insertion Loss	PSNEXT	NEXT	PSACRF	ACRF	Return Loss	TCL	PSANEXT		PSAACRF				
	(min)	(min)	(min)	(min)	(min)	(min)	(min)	(min)	(min)	(min)	(min)	(min)	(min)	(min)	(min)	
	General Cable Guaranteed	General Cable Guaranteed	TIA Guaranteed	TIA Guaranteed	TIA Guaranteed	TIA Guaranteed	TIA Guaranteed	TIA Guaranteed	TIA Guaranteed	TIA Guaranteed	TIA Guaranteed	General Cable Typical	General Cable Typical	TIA Guaranteed	General Cable Guaranteed	General Cable 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	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	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	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	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	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	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	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	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	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	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	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	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	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	64.0	24.2	32.2	36.2

Note: Values are expressed in dB per 100 m (328 ft.) length @ 20°C.  
 \*PSACR & ACR not specified in ANSI/TIA 568.2-D

**CROSS-SECTION**



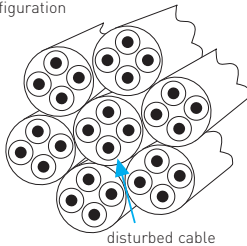
**ELECTRICAL CHARACTERISTICS**

	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):	Ohms 1-500 MHz	100 ± 15

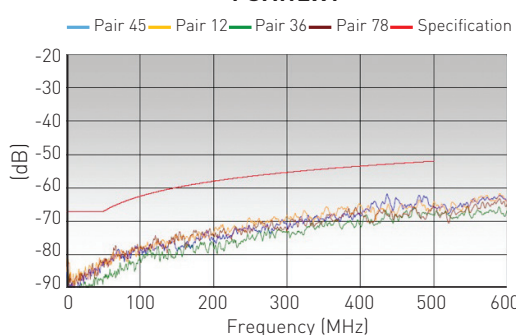
**4 PAIR CABLES:**

Bundles of 7 Test Results

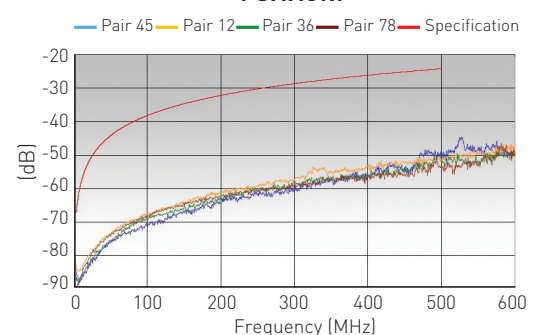
Six-around-one configuration



**PSANEXT**



**PSAACRF**



Data subject to change without notice.