



SWC-5079

Industrial Ethernet Cat 6, 4 Bonded-Pair 23AWG (Solid) Bare Copper, PO Insulation, Overall Foil Shield, PVC Inner Jacket, PVC Outer Jacket, MSHA, CMX-Outdoor 600V AWM 21047

CONSTRUCTION & DIMENSIONS

Number of Conductors	8
Number of Pairs	4, Bonded with Center Separator
AWG Size	23
Conductor Stranding	Solid
Conductor Type	Bare Copper
Insulation Type	PO - Polyolefin
Insulation Color Code	White/Blue Stripe & Blue, White/Orange Stripe & Orange, White/Green Stripe & Green, White/Brown Stripe & Brown
Inner Jacket Type	PVC - Polyvinyl Chloride
Inner Jacket Color	White
Nominal O.D.	0.254"
Rip Cord	Yes
Outer Shield	100% Aluminum/Polyester Bi-Laminate Tape
Drain Wire	24 AWG 7/32 TC
Outer Jacket	PVC - Polyvinyl Chloride
Overall Nominal O.D.	0.335"

ELECTRICAL CHARACTERISTICS

Max. Conductor DCR	25 Ohms/1,000'	Max. Capacitance Unbalance	330 pF/ft
Max. Delay	537 ns/100m	Max. Delay Skew	45 ns/100m
Nom. Velocity of Propagation	72%	Voltage	300V (CMR, CMX-Outdoor) 600V (AWM 21047)
High Frequency	<i>See page 2</i>		

MECHANICAL CHARACTERISTICS

Temperature	75C (UL); -40C to +75C (Operating); -25C to +75C (Installation); -40C to +80C (Storage)		
Bend Radius	4 in (100 mm)		
Max. Pull Tension	40 lbs (18 kg)		
Bulk Cable Weight	47 lbs/1,000'		

STANDARDS AND COMPLIANCE

Environmental Suitability	Indoor/Outdoor, Indoor, Outdoor, Sunlight Resistance, Oil Resistance, Aerial
Flammability / Reaction to Fire	UL1666 Riser, FT4, FT4, IEEE 1202 Vertical Tray Flame Test, IEC 60332-1-2
CPR Compliance	CPR Euroclass: Eca; CPR UKCA Class: Eca
NEC / UL Compliance	Article 800, CMR;CMX-Outdoor
AWM Compliance	AWM 21047
CEC / C(UL) Compliance	CMX-Outdoor;CMG
NEMA Compliance	ANSI/NEMA WC-66
Data Category	Category 6
TIA/EIA Compliance	ANSI/TIA-568.2-D Category 6
ISO/IEC Compliance	ISO/IEC 11801-1, IEC 61156-5
European Directive Compliance	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), REACH, EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE), REACH: 2020-01-16
UK Regulation Compliance	UKCA Mark
APAC Compliance	China RoHS II (GB/T 26572-2011)

HIGH FREQUENCY

Frequency [MHz]	1	4	8	10	16	20	25	31.25	62.5	100	155	200	250
Max. Insertion Loss (Attenuation) [dB/100m]	2.0	3.8	5.3	6	7.6	8.5	9.5	10.7	15.4	19.8	25.2	29.0	32.8
Min. NEXT [dB]	74.3	65.3	60.8	59.3	56.2	54.8	53.3	51.9	47.4	44.3	41.5	39.8	38.3
Min. PSNEXT [dB]	72.3	63.3	58.8	57.3	54.3	52.8	51.3	49.9	45.4	42.3	39.5	37.8	36.3
Min. ACR [dB]	72.3	61.5	55.4	53.3	48.7	46.3	43.8	41.2	32	24.5	16.3	10.8	5.5
Min. PSACR [dB]	70.3	59.5	53.4	51.3	46.7	44.3	41.8	39.2	30	22.5	14.3	8.8	3.5
Min. ACRF (ELFEXT) [dB]	67.8	55.8	49.7	47.8	43.7	41.8	39.8	37.9	31.9	27.8	23.9	21.8	19.8
Min. PSACRF (PSELFEXT) [dB]	64.8	52.7	46.7	44.8	40.7	38.8	36.8	34.9	28.9	24.8	20.9	18.8	16.8
Min. RL (Return Loss) [dB]	21	24	25.5	26	26	26	25.3	24.6	22.5	21.1	19.8	19	18.3
Max./Min. Input Impedance (unFitted) [Ohm]	100 ± 15	100 ± 15	100 ± 15	100 ± 15	100 ± 15	100 ± 15	100 ± 15	100 ± 15	100 ± 15	100 ± 15	100 ± 22	100 ± 22	100 ± 22
Max./Min. Fitted Impedance [Ohm]	100 ± 15	100 ± 15	100 ± 15	100 ± 15	100 ± 15	100 ± 15	100 ± 15	100 ± 15	100 ± 15				

Operating temperatures are subject to length de-rating. Cable passes -40C Cold Bend per UL 1581. Not intended for 600 V electrical power delivery.