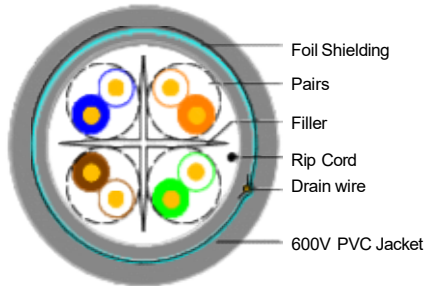


Code: MSEC-C64P 600V

Description: MASER MSEC-C64P 600V F-UTP 7953 CAT6 4PR 23AWG ANSI/TIA-568.2-D PVC RoHS

Applications: Industrial Ethernet Cat6 suitable for harsh environments, Oil and Sunlight resistant Industrial grade PVC, Indoor or outdoor use, 600V rated - suitable to run inconjunction with mains circuits.

Cross Section



Cable Description

Conductor

Material	BC
Stranding	Solid
Wire Gage	23AWG

Insulation

Material	PP
Dia.(+/-0.05mm)	1.09
Color Code	WH/BL & BL WH/OG & OG WH/GN & GN WH/BN & BN

Paired

Cabling

Order of the Pair	See the Cross Section
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Sheath

	(Industrial Grade)
Material	PVC PVC
Rip Cord	200D*3
Thickness(+/-0.05mm)	0.54 0.76
Dia.(+/-0.30mm)	6.60 8.50
Drain Wire(+/-0.02mm)	TC 0.20*7
Shielding	Aluminium Tape / Polyester Film

Mechanical Characteristics

Reference Standard : UL 444

Test Material	PVC
Before Tensile Strength(Mpa)	≥ 13.8
Aging Elongation(%)	≥ 100
After Tensile Strength(% of unaged)	≥ 85
Aging Elongation(% of unaged)	≥ 50
Cold Bend(-20±°C×4hrs)	No crack
Operating Temperature Range	-30~+90°C
Min.Bend Radius(Install)	10×D

Revision History

Define by : Bob	Rev : A/2
Prepared by: King	Date : 2024-11-4
Approved by: Gavin	Page : 1 of 1

Electrical Characteristics

Reference Standard : ANSI/TIA-568.2-D

Test Item(20°C)

	Units	Spec
1.Max.Conductor DC Resistance	Ω/km	93.8
2.Max.Unbalance of Pair DC Resistance	%	2.5
3.Dielectric Strength between Pairs	kV/2s	DC2.5
4.Min.Insulation Resistance	MΩ·km	5000
5.Max.Pair Mutual Capacitance	nF/100m	5.6
6.Max.Pair Capacitance Unbalance	pF/100m	330
7.Impedance(1 to 250MHz)	Ω	100±15

Frequency (MHz)	Min.RL (dB)	Max.IL (dB/100m)	Min. NEXT(dB)	Min.PS NEXT(dB)
1	20.0	2.0	74.3	72.3
4	23.0	3.8	65.3	63.3
8	24.5	5.3	60.8	58.8
10	25.0	6.0	59.3	57.3
16	25.0	7.6	56.2	54.2
20	25.0	8.5	54.8	52.8
25	24.3	9.5	53.3	51.3
31.25	23.6	10.7	51.9	49.9
62.5	21.5	15.4	47.4	45.4
100	20.1	19.8	44.3	42.3
200	18.0	29.0	39.8	37.8
250	17.3	32.8	38.3	36.3

Frequency (MHz)	Min.ELFEXT (dB)	Min.PS ELFEXT(dB)	Max.Delay (ns/100m)	Max.Delay skew(ns/100m)
1	67.8	64.8	570	45
4	55.8	52.8	552	45
8	49.7	46.7	547	45
10	47.8	44.8	545	45
16	43.7	40.7	543	45
20	41.8	38.8	542	45
25	39.8	36.8	541	45
31.25	37.9	34.9	540	45
62.5	31.9	28.9	539	45
100	27.8	24.8	538	45
200	21.8	18.8	537	45
250	19.8	16.8	536	45
200	21.8	18.8	537	45
250	19.8	16.8	536	45

RoHS 3.0 Guideline

Cadmium content (Cd)	< 0.01%(100ppm)
Lead content (Pb)	<0.1% (1000ppm)
Mercury content (Hg)	<0.1% (1000ppm)
Chromium (VI) content	<0.1% (1000ppm)
Polybrominated Biphenyls (PBB)	<0.1% (1000ppm)
Polybrominated Diphenyl Ether (PBDE)	<0.1% (1000ppm)
Diethyl hexyl phthalate (DEHP)	<0.1% (1000ppm)
Butyl phenyl phthalate (BBP)	<0.1% (1000ppm)
Dibutyl phthalate (DBP)	<0.1% (1000ppm)
Diisobutyl phthalate (DIBP)	<0.1% (1000ppm)