

# #4509 4 Pair 24 AWG UL 444 CMR LSZH



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Part NO: #4509  
Product Code: RGW-2017-9

### Product Description

#### Application:

Halogen Free Cable for communication and signal control systems.

#### Multi-construction

4Pair

#### Construction

<b>4Pair</b>	<b>Tinned Copper</b>
Nom. Diameter (mm)	0.51
<b>Insulation</b>	<b>Skin-Foam-</b>
Nom. Thickness (mm)	Skin 0.23
Nom. Diameter (mm)	0.97±0.03
Insulation Color	See the table 1
<b>Foamed PP foil Spiral</b>	<b>&gt;=125%</b>
<b>Total AL-Pet-AL shield</b>	<b>&gt;=125%</b>
<b>Braid Shield</b>	<b>Tinned Copper</b>
Construction(mm)	T0.10×16×6
Coverage Area(%)	Min 60%
<b>Jacket</b>	<b>LSZH</b>
Nom. Thickness (mm)	0.65
Nom. Diameter (mm)	6.40±0.20
Jacket Color	Black (RAL 9005)
<b>Marking(black ink)</b>	
RG Wire & Cable # 4509 E478021 (UL) CMR 4 PAIR 24 AWG 75C	
[MeterMark]	
<b>PACKAGING</b>	
500M/Wooden Drum.	
<b>UV Resistance</b>	UL 1581 Para 1200
Reference Standards	Category 5e to TIA/EIA568-B ISO 11801 1301-TEL 301 6010--004 Uen Rev C

#### RoHS GUIDELINE

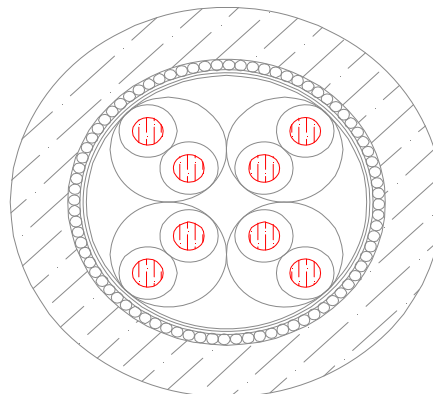
We operate according to the following standards

Control Item	Standard	Testing Method	Testing Equipment
Cadmium content (Cd)	<0.01%	EN1122	ICP-AES
Lead content (Pb)	<0.1%	EPA3050B	ICP-AES
Mercury content (Hg)	<0.1%	EPA3052	ICP-AES
Chromium (VI) content	<0.1%	EPA3060(UN-VIS)	ICP-AES
Polybrominated Biphenyls(PBB)	Forbidden	GC/MS	
Polybrominated Diphenyl Ether (PBDE)	Forbidden	GC/MC	

#### Revision History

rev11 Product code update 2018-2-9

### Design



#### Electrical Characteristics

Max. Conductor DC Resistance at 20°C (Ω/Km)		93.8
Rated Temperature(°C)	-20(during install) -40(fixed) to +75	
Operating Voltage(V)		100
20°C Insulation Resistance(MΩ.KM)		5000
Bending radius(mm)		26
Characteristic Impedance 1-125MHz(Ω)		100±15
Min. Dielectric Strength		
	Cond-Cond.	2.5kV DC 2 sec
	Cond-shield	2.5kV DC 2 sec
Mutual Capacitance		<56 nF / Km
Transfer Impedance (Zt)	1 -30 MHz	Max 10mOhm/m
	30 - 125 MHz	Max 30mOhm/m
Attenuation	1MHz	<2.1
(dB / 100m)	4MHz	<4.1
	10MHz	<6.5
	16MHz	<8.3
	31.25MHz	<11.7
	62.5MHz	<17.0
	100MHz	<22.0
	125MHz	<24.9
PSNEXT	1 - 125MHz	Min 62.3-15*log <sub>10</sub> (f/fo)
PSELFEXT	1 - 125MHz	Min 60.8-20*log <sub>10</sub> (f/fo)
Return Loss	4 - 10 Mhz	Min 20+5*log <sub>10</sub> (f/fo)
	10 - 20 Mhz	25
	20 - 100 Mhz	Min 25-7*log <sub>10</sub> (f/fo*20)
Unbalanced Attenuation LCL	1-100MHZ	40-10*log <sub>10</sub> (f/fo)
Delay Skew	4 - 125 MHz	Max 0.45 ns/m
Screen Resistance		19 mOhm/m
Flame Propagation		UL 1666 CMR IEC 332-3-24
Acid Gas Emission		To IEC 60754-2

Table 1

Pair NO:	Color	
	A	B
1	White	Blue
2	White	Orange
3	White	Green
4	White	Brown