

Bulk Guitar Cables: High Impedance Transmission Cables

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W2319



W2524



Most musical instrument sound pick-ups, for example those in electric guitars, are comprised of high impedance circuits driven mainly by voltage, with very little electrical current flow. That is why handling noise (microphonics) can be a problem for guitar cables. Microphonic noise is caused by the minute voltage generated when a cable is flexed, stepped on, etc. Guitar cables must be designed to prevent this, so a conductive PVC layer is placed under the shield conductor to drain away this voltage. Note: This conductive layer must be stripped back when wiring, or a partial short will result.

SPECIFICATIONS

Configuration			
Part No.		W2319	W2524
Conductor	Details	12/0.18TA	50/0.12A
	Size(mm ²)	0.305mm ² (#23AWG)	0.565mm ² (#20AWG)
Insulation	Ov. Dia.(mm)	1.6Ø (0.063")	2.7Ø (0.106")
	Material	PE	
	Color	Clear	
Sub-Shield	Ov. Dia.(mm)	1.8Ø (0.071")	3.3Ø (0.130")
	Material	Conductive PVC (Carbon PVC)	
	Color	Black	
Main-Shield	Served-Shield	Approx. 38/0.16TA	Approx. 55/0.18A
Jacket	Ov. Dia.(mm)	5.0Ø (0.197")	6.0Ø (0.236")
	Material	PVC	
	Color	Black	
Roll Sizes		100m (328Ft)	100m (328Ft) / 200m (656Ft)
Weight per 100m (328Ft) roll		3.5Kg	5.1Kg

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ELECTRICAL & MECHANICAL CHARACTERISTICS

Part No.		W2319	W2524
DC Resistance at 20°C	Inner Conductor	0.064Ω/m(0.020W/Ft)	0.033Ω/m(0.010Ω/Ft)
	Shield Conductor	0.026Ω/m(0.0079Ω/Ft)	0.014Ω/m(0.0043Ω/Ft)
Capacitance at 1kHz, 20°C		155pF/m (47.3pF/Ft)	130pF/m (39.7pF/Ft)
Inductance		0.3µH/m (0.092µH/Ft)	0.2µH/m (0.061µH/Ft)
Electrostatic Noise*		0.13mV Max.	0.15mV Max.
Electromagnetic Noise At 10kHz*		0.07mV Max.	0.07mV Max.
Microphonics*		0.3mV Max.	0.3mV Max.
Voltage Breakdown		Must withstand at DC 500V/15sec.	
Insulation Resistance		100000 MΩ × m Min. at DC 500V, 20°C	
Flex Life		11,000 cycles	15,000 cycles
Tensile Strength (26°C, 65%RH)		303 N	578 N
Emigration		Non-emigrant to ABS resin	
Applicable Temperature		-20°C~ +60°C(-4°F~ +140°F)	

*Using standard testing methods of Mogami Wire & Cable Corp.

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