

Piezo Unjacketed Spiral Wrapped Coaxial Cable



- Coaxial design piezo sensor
- Shielded construction
- Ideal for linear application
- Piezo film technology

DESCRIPTION

Piezo cable is another form of piezo polymer sensors. Designed as a coaxial cable, the Piezo polymer is the dielectric between the center core and the outer braid. When the cable is compressed or stretched, a charge or voltage is generated proportional to the stress.

Piezo cable has a number of advantages in certain applications. Due to its coaxial design, the cable is self-shielded, allowing its use in a high EMI environment. The piezo cable can be spliced to passive coax, using standard coax splice techniques. It is extremely rugged and will stand up to heavy loads. Its linear format makes it ideal for monitoring large areas.

In the cable construction, two narrow ribbons of PVDF film are helically wound around the inner conductor, which comprises 20 awg stranded silver-plated copper wire. The cable is then braided, and jacketed with an extruded high-density polyethylene.

The cable is available in short lengths (in multiples of 1 m), or as single cut lengths wound on spools.

FEATURES

- Passive, long length sensor
- Temperature stability to 85 °C
- Self-shielded coaxial construction
- High voltage response
- Low impedance per unit length
- Simplified interconnections

APPLICATIONS

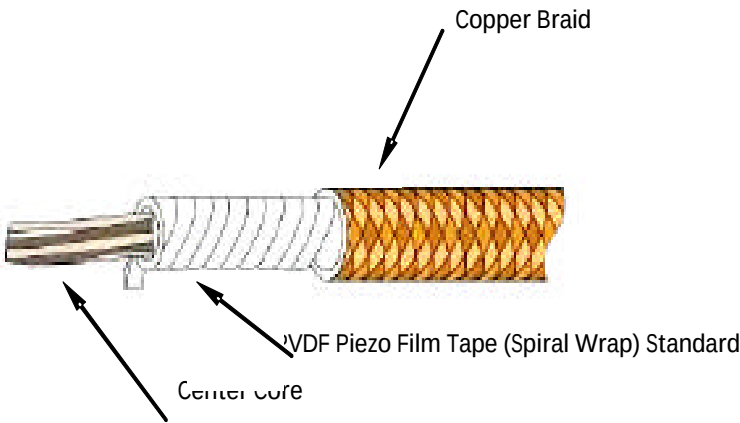
- Musical instrument pickups

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PERFORMANCE SPECIFICATIONS

Properties	Typical Value	Units
Outside Diameter	1.60	mm
Capacitance @ 1 kHz	950	pF/m
Resistance (shield)	47	DCR/km
Tan Delta (dissipation factor)	0.016	@ 1 kHz
Hydrostatic Piezo Coefficient	20	pC/N
Resistance (center core)	31	DCR/km

DIMENSIONS IN INCHES (mm)



20 AWG Cable - Spiral Wrap

Description	Dimensions		Capacitance pF/ft (pF/m)
	Center Core	Outside Diameter	
20 AWG Piezo Cable (spiral)	1.02 mm	1.60 mm	279 (980)