

# FIT<sup>®</sup>-221L LSZH Heat-Shrink Tubing



The environmentally friendly choice—with no lead, no halogens, low smoke generation, and no toxic fumes

**N**ew FIT-221L LSZH heat-shrink tubing is a highly flexible, environmentally friendly, flame-retardant option to standard tubing. It contains no lead, no halogens, has low-smoke generation, and produces no toxic fumes when burned, making it ideal in helping OEMs and maintenance personnel satisfy CA Prop 65 and RoHS requirements in a variety of applications. The tubing also meets NASA's definition of low outgassing.

- 2:1 shrink ratio
- -55°C to +105°C temperature range
- UL VW-1 (125°C, 600 V)
- Low water absorption
- Low outgassing
- Ten sizes ranging from 3/64" to 1" in diameter.
- Low smoke, zero halogen polyolefin
- Halogen free
- Lead free
- Antimony free
- RoHS compliant
- CA Prop 65 compliant

## Alpha Wire

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# FIT<sup>®</sup>-221L LSZH Heat-Shrink Tubing

## Specifications

### Operating Temperature

- -55°C to +125°C (UL)

### Shrink Temperature

- 100°C min.
- 110°C full recovery

### Material

- Cross-linked polyolefin

### Color

- Black

### Physical Properties

- Tensile strength: 1500 psi (10.34 N/mm<sup>2</sup>)
- Elongation: 200% min
- Longitudinal change: -10% to 0%
- Flame retarded

### Chemical Properties

- Corrosive effect: none
- Water absorption: 0.7% max.
- Low outgassing: Meets NASA's definition of low outgassing with TML of 1.0% and CVCM of less than 0.01%
- Lead free
- Halogen free
- Antimony free

### Electrical Properties

- 600 V (UL)
- Volume resistivity: 1014 ohm-cm

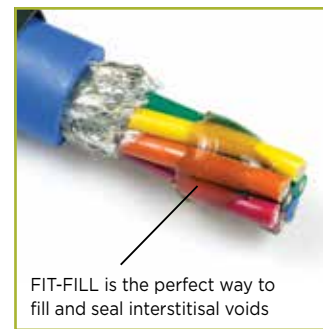
### Approvals

- UL 224
- UL VW-1

Part No.	Supplied ID, Min.		Recovered ID, Max.		Recovered Wall Thickness, Nom.		Availability	
	Inch	mm	Inch	mm	Inch	mm	Feet	m
<b>FIT-221L-3/64</b>	0.046	1.17	0.023	0.58	0.016	0.41	1000	305
<b>FIT-221L-1/16</b>	0.063	1.60	0.031	0.79	0.017	0.43	1000	305
<b>FIT-221L-3/32</b>	0.093	2.36	0.046	1.17	0.020	0.51	500	152
<b>FIT-221L-1/8</b>	0.125	3.18	0.062	1.57	0.020	0.51	200	60.9
<b>FIT-221L-3/16</b>	0.187	4.75	0.093	2.36	0.020	0.51	500	152
<b>FIT-221L-1/4</b>	0.250	6.35	0.125	3.18	0.025	0.64	200	60.9
<b>FIT-221L-3/8</b>	0.375	9.53	0.187	4.75	0.025	0.64	200	60.9
<b>FIT-221L-1/2</b>	0.500	12.70	0.250	6.35	0.025	0.64	200	60.9
<b>FIT-221L-3/4</b>	0.750	19.05	0.375	9.53	0.030	0.76	200	60.9
<b>FIT-221L-1IN</b>	1.000	25.40	0.500	12.70	0.035	0.89	200	60.9

## FIT-FILL Adhesive

A unique adhesive filler, FIT-FILL is amber bead-like balls of adhesive that are ideal for use when additional adhesive is needed, or when the tubing does not effectively cover the desired locations. FIT-FILL is an ideal complement to FIT heat-shrink tubing for applications involving multiple wires in a tubing array, where the tubing's inner adhesive does not touch the inner wires. FIT-FILL aids in creating a better tubing-to-cable seal to prevent water entry, while providing extra protection to maintain the integrity of the cable.



### Part No.

- FITFILL1

### Material

- Modified Polyamide

### Color

- Amber

### Dimensions

- ID: 0.138" (3.51 mm)
- OD: 0.295" (7.49 mm)
- Opening: 0.055" (1.40 mm)
- Length: 0.197" (5 mm)

### Operating Temperature

- -10°C to 105°C

### Shrink Temperature

- 90°C

### Availability

- Packs of 1000

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