

# **FIT**® Preferred Heat Shrink Products

## GENERAL PURPOSE, IRRADIATED POLYOLEFIN

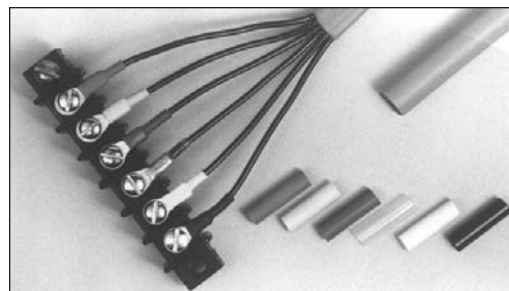
### **FIT**®-221

MIL-DTL-23053/5C,  
CLASS 1, 2  
UL STANDARD 224  
CSA STANDARD 198  
RoHS COMPLIANT

## CHOOSE **FIT**®-221 FOR:

- General Purpose Protection and Repair
- Identification and Beautifying Substrates
- Insulation from Environment
- Reduced Longitudinal Shrinkage
- Resistance to Water, Fungus, UV Light (black only)
- Use with **XTRA•GUARD**® 1

**2 TO 1** SHRINK RATIO



## **FIT**®-221 APPLICATIONS:

- General Purpose Insulation and Repair
- Wire and Cable Harnessing and Bundling
- Cable and Connector Protection
- Wire and Tubing Splicing and Connecting
- **XTRA•GUARD**® 1 Applications
- Automated Cutting Machines (spools)

## CHARACTERISTICS

### OPERATING TEMPERATURE:

- -55°C to 135°C

### SHRINKAGE RATIO:

- Approximately 2 to 1 at 121°C

### COLOR DESCRIPTION:

- 4-Foot Lengths:  
3/64 to 2 Inch – Black, White, Clear, Red, Yellow, Blue, Green  
3 and 4 Inch – Black, Clear
- 6-Inch Lengths:  
3/64 to 1 Inch – Black, White, Clear, Red, Yellow, Blue, Green  
1-1/2 to 3 Inch – Black, Clear
- 1/2 or 1 Inch Cut Pieces: Black
- Spools: See Color Availability Chart Next Page

### PHYSICAL PROPERTIES:

- Tensile Strength: 1500 psi, (106 kg/cm<sup>2</sup>)
- Ultimate Elongation: 200%
- Longitudinal Shrinkage: -5%
- Specific Gravity: 1.35
- Secant Modulus: 2.5 x 10<sup>4</sup> max.
- Flammability: Self-Extinguishing

### CHEMICAL PROPERTIES:

- Corrosive Effect: Passes Copper Stability Test
- Fungus Resistance: No Growth

### ELECTRICAL PROPERTIES:

- Dielectric Strength: 500V/mil (197 kV/cm)
- Volume Resistivity: 10<sup>14</sup> ohm-cm

## SPECIFICATIONS

- MIL-DTL-23053/5C, Class 1, 2
- UL Standard 224 (except for Clear)
- CSA Standard 198 (except for Clear)
- RoHS Compliant

### Packaged Assortments

Assorted Sizes of 6" Lengths  
Each Length – Size Identified  
Assorted Colors

Alpha Part No.	Tubing Size Range	Lengths Per Box
<b>FIT-221-MS-1</b>	3/64" – 3/16" (5 Sizes)	6 per Size (30 Lengths)
<b>FIT-221-MS-2</b>	1/4" – 3/4" (4 Sizes)	4 per Size (16 Lengths)

**Recommended For Use With**  
**XTRA•GUARD**® 1  
**Extra-Premium Grade PVC Jacketed**  
**General Purpose Cables**

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### **FIT**®-221

Alpha Part No. And Size	Minimum Supplied I.D.		Maximum Recovered I.D.		Nom. Recovered Wall Thickness		4 Ft. Lengths Total Ftg.	Standard Packages Spools		No. Cut Pieces 6 Inch	No. Cut Pieces 1/2" or 1"	
	Inches	mm	Inches	mm	Inches	mm		Tot. Ftg.	Tot. Ftg.			
<b>FIT-221-3/64</b>	0.046	1,17	0.023	0,58	0.016	0,41	100	1000		40	1000	
<b>FIT-221-1/16</b>	0.063	1,60	0.031	0,78	0.017	0,43	100	1000	100	70	36	1000
<b>FIT-221-3/32</b>	0.093	2,36	0.046	1,17	0.020	0,50	100	500	100	65	32	1000
<b>FIT-221-1/8</b>	0.125	3,18	0.062	1,58	0.020	0,50	100	500	100	60	28	1000
<b>FIT-221-3/16</b>	0.187	4,75	0.093	2,36	0.020	0,50	100	500	100	50	24	1000
<b>FIT-221-1/4</b>	0.250	6,35	0.125	3,18	0.025	0,63	100	250	100	40	20	1000
<b>FIT-221-3/8</b>	0.375	9,53	0.187	4,75	0.025	0,63	100	200	50	35	16	1000
<b>FIT-221-1/2</b>	0.500	12,70	0.250	6,35	0.025	0,63	20	150	50	32	14	-
<b>FIT-221-3/4</b>	0.750	19,10	0.375	9,53	0.030	0,76	20	250	50	24	12	-
<b>FIT-221-1</b>	1.000	25,40	0.500	12,70	0.035	0,88	20	250	50	16	8	-
<b>FIT-221-1-1/2</b>	1.500	38,10	0.750	19,10	0.040	1,02	20	125	-	-	5	-
<b>FIT-221-2</b>	2.000	50,80	1.000	25,40	0.045	1,16	20	125	-	-	3	-
<b>FIT-221-3</b>	3.000	76,20	1.500	38,10	0.050	1,27	8	100	-	-	2	-
<b>FIT-221-4</b>	4.000	101,60	2.000	50,80	0.055	1,40	8	50	-	-	1	-

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### SPOOL COLOR AVAILABILITY CHART

<b>FIT-221</b> Tubing Size	Put-Up	Colors
3/64"	1000'	Black, Clear
1/16"	1000'	All Colors*
	100'	Black, Clear
3/32"	70'	All Colors
	500'	All Colors
	100'	Black, Clear
1/8"	65'	All Colors
	500'	All Colors
3/16"	100'	Black, Clear
	60'	All Colors
	500'	All Colors
1/4"	50'	All Colors
	250'	All Colors
	100'	Black, Clear
	40'	All Colors

<b>FIT-221</b> Tubing Size	Put-Up	Colors
3/8"	200'	All Colors
	50'	Black, Clear
	35'	All Colors
1/2"	150'	All Colors
	50'	Black, Clear
3/4"	32'	All Colors
	250'	All Colors
	50'	Black, Clear
1"	24"	All Colors
	250"	All Colors
1-1/2"	50"	Black, Clear
	16"	All Colors
2"	125'	Black, Clear
3"	100'	Black, Clear
4"	50'	Black, Clear

\*All colors include black, white, clear, red, yellow, blue, green