

73 Series

HIGH FREQUENCY FILM CARDS



Smiths Interconnects 73 series High Frequency Film Cards are designed to offer accurate and repeatable dissipation of low Radio Frequency power signals.

We offer a complete line of standard and custom wave-guide attenuator elements. Deposition of thin film metallization on a specific substrate with an optical grade finish produces an extremely stable resistive film. A protective coating is evaporated over the resistive film to prevent oxidation. Controlled processes throughout production ensure repeatability.

Ideal for defense applications, film cards are available in four materials, Fiberglass, Mylar®, Kapton® or Mica. They feature a surface resistance range of 50 to 400 ohms per square and power handling up to 8 watts. Applications include Waveguide Elements, Crystal Detector Protection, Directional Coupler Termination and Mode Suppression in Cavity Filters.

A complete line of standard high frequency wave-guide attenuator elements on multiple substrate material.

Features and Benefits

- Thin film construction
- Various substrate materials
- High frequency
- Customizable ohm values

Applications:

- Waveguide Elements
- Crystal Detector Protection
- Directional Coupler Termination
- Mode Suppression in Cavity Filters.

Technical Characteristics

High Frequency Film Cards-73 Series

Electrical

Resistance Range	50 to 400 Ohms per square
Resistance Tolerance	+/- 10%
Dielectric Constant	
Fiberglass	4.8 Typical @ 1 MHz
Mylar	3.3 Typical @ 60 Hz
Kapton	3.9 Typical @ 1 Hz
Mica	6.0 Typical @ 1 Hz

Environmental

Operating Temperature	-55°C to +130°C
Storage Temperature	-65°C to +130°C
Moisture Sensitivity Level	MSL 1 - Unlimited

Mechanical

Substrate Material	See table
Resistive Film	Nichrome
Terminal Material	Silver
Protective Coating	Clear

Marking

Unit Marking	None
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Quality Assurance

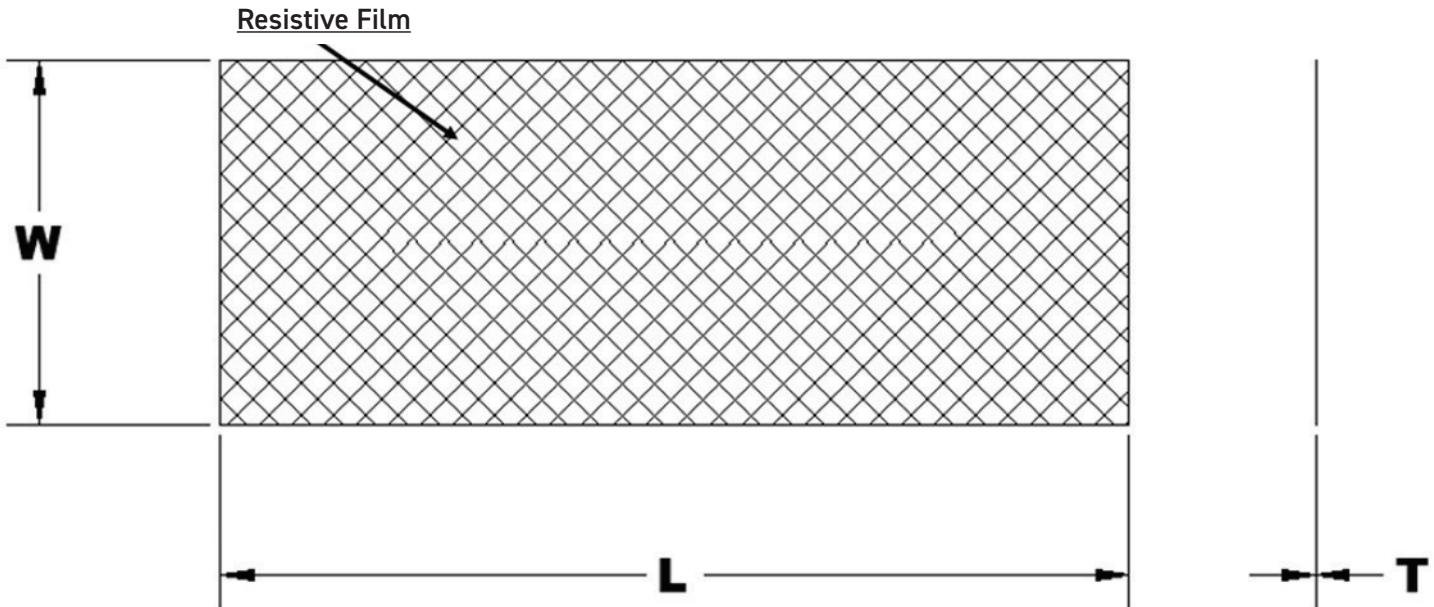
	Sample visual and mechanical inspection - 1.0 AQL per mechanical drawing requirements. 100% visual and mechanical inspection per drawing requirements for data sheet. Periodic electrical inspection performed for commercial grade products.
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Packaging

Standard Packaging	Individual Bag Package
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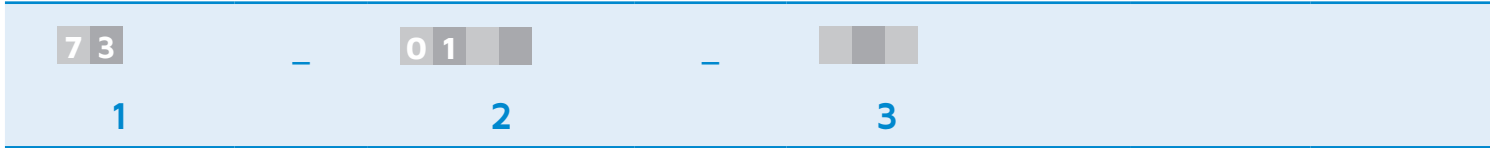
Mechanical (Mechanical drawing dimensioned in mm)

73-XXXX-XXX	Substrate Material	L = Length	W = Width	T = Thickness
73-0160-XXX	Fiberglass	5.00	12.00	0.0100 +0.0004/-0.0003
73-0161-XXX	Fiberglass	5.00	12.00	0.0250 +0.0004/-0.0003
73-0162-XXX	Fiberglass	5.00	12.00	0.0320 +0.0004/-0.0003
73-0163-XXX	Fiberglass	5.00	12.00	0.0620 +0.0004/-0.0003
73-0157-XXX	Mylar	5.00	12.00	0.0010 ± 0.0005
73-0166-XXX	Mylar	5.00	12.00	0.0020 ± 0.0005
73-0158-XXX	Mylar	5.00	12.00	0.0050 ± 0.0005
73-0159-XXX	Mylar	5.00	12.00	0.0100 ± 0.0005
73-0167-XXX	Kapton	5.00	12.00	0.0020 ± 0.0005
73-0168-XXX	Kapton	5.00	12.00	0.0050 ± 0.0005
73-0154-XXX	Mica	2.00	5.00	0.0020 ± 0.0005
73-0155-XXX	Mica	2.00	5.00	0.0030 ± 0.0005
73-0156-XXX	Mica	2.00	5.00	0.0050 ± 0.0005



Unless otherwise specified, tolerance: X.XX = ±0.01" X.XXX = ±0.005"

How To Order



1 Series Name

7 3 73 = Film Card

2 Substrate Material and Thickness

0 1 Random Numbers

XXXX	Substrate Material	L = Length	W = Width	T = Thickness
0160	Fiberglass	5.00	12.00	0.0100 +0.0004/-0.0003
0161	Fiberglass	5.00	12.00	0.0250 +0.0004/-0.0003
0162	Fiberglass	5.00	12.00	0.0320 +0.0004/-0.0003
0163	Fiberglass	5.00	12.00	0.0620 +0.0004/-0.0003
0157	Mylar	5.00	12.00	0.0010 ± 0.0005
0166	Mylar	5.00	12.00	0.0020 ± 0.0005
0158	Mylar	5.00	12.00	0.0050 ± 0.0005
0159	Mylar	5.00	12.00	0.0100 ± 0.0005
0167	Kapton	5.00	12.00	0.0020 ± 0.0005
0168	Kapton	5.00	12.00	0.0050 ± 0.0005
0154	Mica	2.00	5.00	0.0020 ± 0.0005
0155	Mica	2.00	5.00	0.0030 ± 0.0005
0156	Mica	2.00	5.00	0.0050 ± 0.0005

3 Resistance (Ohms)

[] Ohms per square value
050 through 400

Worldwide Support

Connectors

Americas

Sales

connectors.uscsr@smithsinterconnect.com

Technical Support

connectors.ustechsupport@smithsinterconnect.com

Europe

Sales

connectors.emeacsr@smithsinterconnect.com

Technical Support

connectors.emeatechsupport@smithsinterconnect.com

Asia

Sales

asiacsr@smithsinterconnect.com

Technical Support

asiatechsupport@smithsinterconnect.com

Fibre Optics & RF Components

Americas

Sales

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Technical Support

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Europe

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Asia

Sales

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Semiconductor Test

Americas

Sales

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Technical Support

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Europe

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Technical Support

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