

HIGH FREQUENCY FIBERGLASS FILM CARD

DATA SHEET

PART SERIES: 73-XXXX-XXX

SHEET 1 OF 2
Dwg 1016355ECO-071136
Revision A

FEATURES

Thin Film Construction
Various Substrate Materials
High Frequency
Customizable Ohm Values

APPLICATIONS

Waveguide Elements
Crystal Detector Protection
Direction Coupler Termination
Mode Suppression in Cavity Filters

GENERAL DESCRIPTION

Smiths Interconnect metal film fiberglass resistance cards are an extremely stable microwave attenuator material. The substrate is a fine-woven glass cloth, impregnated with temperature thermosetting resin procured to MIL-I-24768 DES G-11. A resistance film of pure nickel chromium alloy is deposited uniformly on the substrate surface. A clear protective coating is then applied over the resistance film. The resistance cards are usable to 18.0 GHz for applications requiring accurate crystal detector protection, mode suppression in cavity filters, waveguide attenuator and termination elements and narrow band stripline loads and attenuators.

ORDERING INFORMATION

Part Identifier: 73-XXXX-XXX

└──┬──┐ (XXX) - OHM/SQ
└──┴──┘ (XXXX) - SEE TABLE CHART

Series	Substrate Material	Thickness
73-0160-XXX	Fiberglass	0.010
73-0161-XXX	Fiberglass	0.025
73-0162-XXX	Fiberglass	0.032
73-0163-XXX	Fiberglass	0.062

SPECIFICATIONS

1.0 ELECTRICAL

Resistance Range: 50 to 400 Ohms/SQ
Resistance Tolerance: $\pm 10\%$
Dielectric Constant: 4.8 Typical @ 1MHz
Nominal Power: 1 Watt per square inch @ 80°C Ambient Handling Capacity

2.0 ENVIRONMENTAL

Operating Temperature: -55°C to +130°C
Non-operating Temperature: -55°C to +130°C
Moisture Sensitivity Level: MSL 1 - Unlimited

3.0 MARKING

Unit Marking: None

4.0 QUALITY ASSURANCE

100% visual and mechanical inspection
for Conformance to Outline Drawing Requirements.
100% electrical inspection performed for commercial grade products

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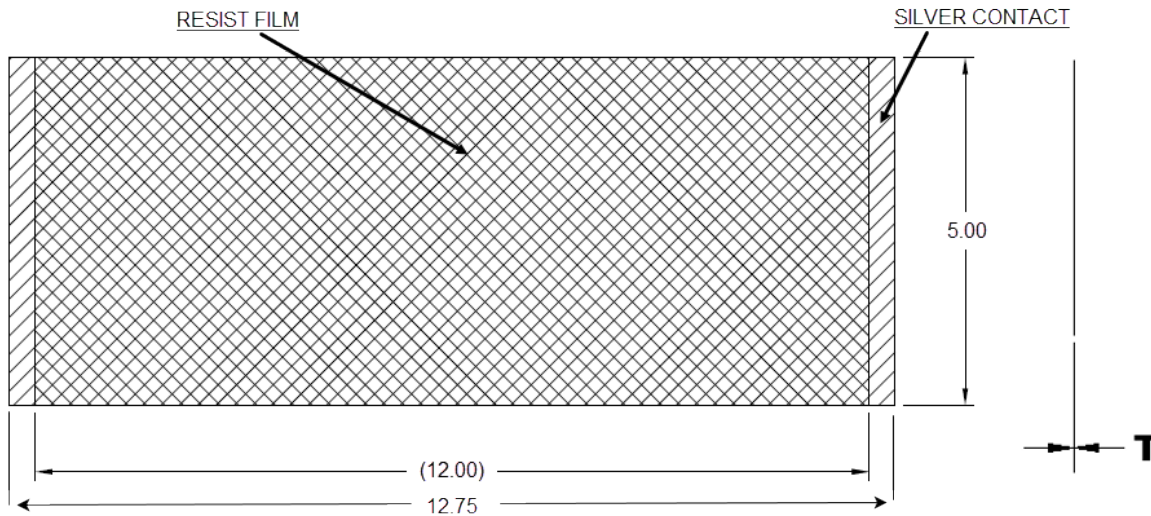
5.0 PACKAGING

Standard Packaging: Individual Bag Package

6.0 MECHANICAL

Substrate Material: Fiberglass
Resistive Film: Nichrome
Terminal Material: Silver
Protective Coating: Clear

73-XXXX-XXX	Substrate Material	T = Thickness
73-0160-XXX	Fiberglass	0.010 + 0.004/-0.003
73-0161-XXX	Fiberglass	0.025 + 0.004/-0.003
73-0162-XXX	Fiberglass	0.032 + 0.004/-0.003
73-0163-XXX	Fiberglass	0.062 + 0.004/-0.003



Unless Otherwise Specified: TOLERANCE: X.XX = ± 0.01