



DATA SHEET PART NUMBER: QFAXXXXSMTF

FEATURES

Ka and Q Band Operating Frequency Self-Passivated Tantalum Nitride Film

Moisture Resistant

NASA-Approved Low Outgassing

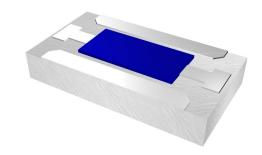
Surface Mount

Pick-And-Place Compatibility

APPLICATIONS

Telemetry

Point-to-Point Radio Phased Array Radar High Frequency Transceiver Instrumentation Satellite



GENERAL DESCRIPTION

EMC Technology's QFA series offers an easy-to-implement surface-mount fixed attenuator solution at 36 to 50 GHz. These attenuators feature a small footprint and are compatible with pick-and-place assembly. QFA attenuators are available in 0 to 10 dB attenuation, in 1dB increments. With a broad range of operating temperature, -55 to 150°C, QFA attenuators are ideal for applications including point-topoint radio, phased array radar, and high frequency transceivers. Tape-and-reel is the standard packaging for QFA series. High-reliability testing is available.

SPECIFICATIONS

1.0 ELECTRICAL

Frequency Range:

QFAXX04SMTF 36 - 40 GHz 40 - 50 GHz QFAXX05SMTF

Attenuation Value: 0 to 10 dB (SEE SHEET 2)

Attenuation Accuracy: ± 0.75 dB VSWR: 1.50:1 Max Power Rating: 0.2 Watts

Operating Temperature: -55 °C To +150 °C -55 °C To +150 °C Storage Temperature:

2.0 MECHANICAL

Alumina Substrate

Resistive Element: Thin-Film Tantalum Nitride

Termination: Thick-Film Gold

Termination Plating: Silver

3.0 UNIT MARKING

Attenuation (0 to 10 dB)

4.0 PACKAGING

Standard: Tape and Reel

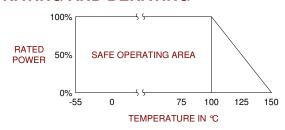
5.0 PART NUMBERING

Part Identifier:

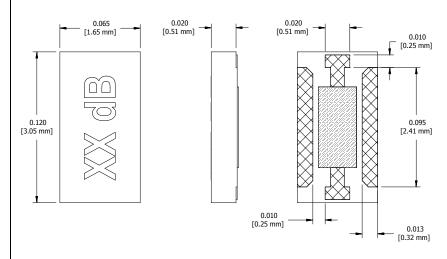
QFAXXXXSMTF

Attenuation Value Frequency Band $0 - 10 \, dB$ 04: 36 - 40 GHz 05: 40 - 50 GHz

POWER RATING AND DERATING



MECHANICAL OUTLINE

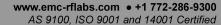


Note: Specifications are subject to change without notice.

TOLERANCE: .XXX

±.005





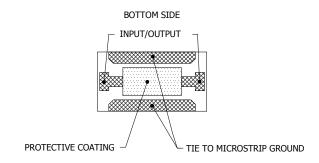




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6.0 AVAILABLE VALUES

dB VALUE	DC RESISTANCE (Ω) QFAXX04SMTF	DC RESISTANCE (Ω) QFAXX05SMTF	TOLERANCE
0.0	CONTINUITY ONLY		
1.0	4.13	4.13	8%
2.0	9.16	13.85	8%
3.0	22.45	24.76	8%
4.0	34.27	35.97	4%
5.0	48.45	44.24	4%
6.0	58.02	50.11	4%
7.0	75.82	60.80	2%
8.0	89.14	71.85	2%
9.0	102.46	82.91	2%
10.0	116.29	96.74	2%



LAND PATTERN 0 0 0 0.020 [0.51] X2 Ø0.010 [Ø0.25] 0.025 [0.64] 0.003 [0.06]

