

Coaxial Isolator Operating from 4GHz to 12GHz

Technical Data Sheet

2A8BBZ-C

FEATURES:

- Coaxial ferrite isolator design
- Wide 4GHz – 12GHz operating range
- SMPM connectors, 2 places
- Isolation of 20dB
- Insertion loss of <1dB

APPLICATIONS:

- Super-conducting quantum systems

DESCRIPTION:

The **2A8BBZ-C** is a coaxial isolator designed for RF systems operating across the 4 to 12 GHz frequency range. Utilizing a ferrite-based coaxial design, the isolator delivers reverse isolation of 20 dB while maintaining a low insertion loss of <1 dB across the operating band. This architecture protects sensitive source components from reflected power and load mismatch, ensuring stable, low-reflection performance with a return loss of >15 dB for high-integrity signal paths. The 2A8BBZ-C presents a 50 Ω impedance and integrates into RF chains through SMPM coaxial connectors, offering a compact footprint for broadband microwave subsystems.

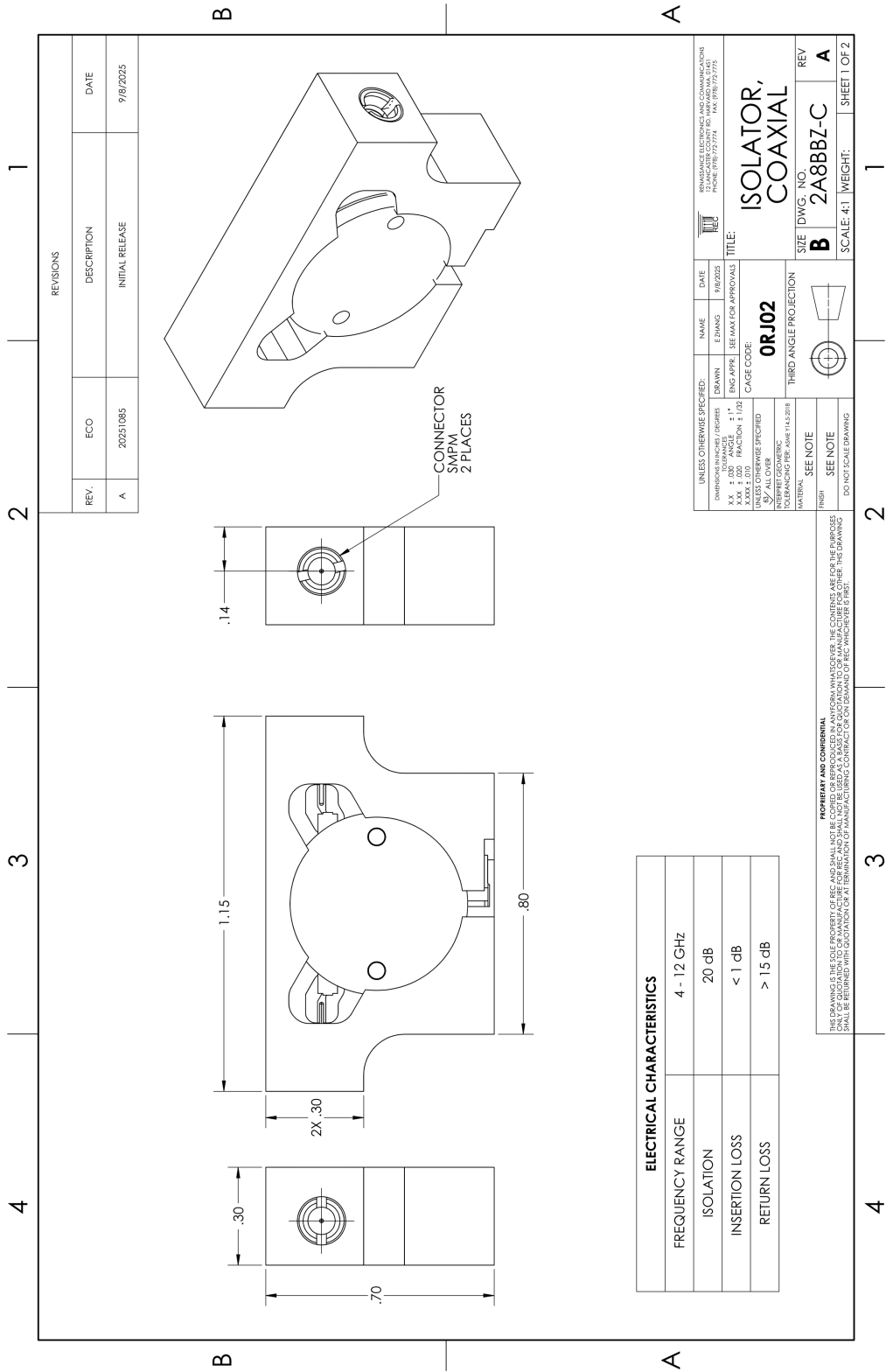
ELECTRICAL CHARACTERISTICS:

DESCRIPTION	MIN	TYP	MAX	UNITS
Frequency Range	4		12	GHz
Isolation	20			dB
Insertion Loss			1.0	dB
Return Loss	15			dB
Impedance		50		Ω

MECHANICAL SPECIFICATIONS

SIZE

Length	1.15" [29.2 mm]
Width	0.80" [20.3 mm]
Height	0.70" [17.8 mm]
Connectors	SMPM (2 places)
Impedance	50 Ω



ELECTRICAL CHARACTERISTICS	
FREQUENCY RANGE	4 - 12 GHz
ISOLATION	20 dB
INSERTION LOSS	< 1 dB
RETURN LOSS	> 15 dB