SCD-0130432020-SF-SC

1/3

Coaxial Directional Coupler, 1 to 4 GHz, 20 dB Coupling Level

SCD-0130432020-SF-SC is a 20 dB coaxial directional coupler that covers the frequency range of 1 to 4 GHz. The typical insertion loss of the coupler is 0.3 dB and coupling ripple is \pm 0.7 dB. The directivity of the coupler is 20 dB. The RF connectors of the coupler are SMA female connectors. The power handling of the coupler is 50 watts maximum. Other configurations, such as different connectors for input and output, are available under different model numbers.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	1 GHz		4 GHz
Insertion Loss		0.3 dB	0.4 dB
Coupling		20 dB	
Coupling Flatness		±0.7 dB	
Directivity		20 dB	
Port Return Loss		20 dB	
Impedance		50 Ω	
Power Handling			50 W (CW)
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+70 °C

Mechanical Specifications:

Item	Specification
RF Ports	SMA Female
Case Material	Aluminum
Finishing	Black Paint
Size A K	2.87" (L) x 0.59" (W) x 0.43" (H), excluding connectors
Outline	CD-SS-FT1

ECCN EAR99

FEATURES

- Broad Band
- Low Insertion Loss
- Flat Coupling Level

APPLICATIONS

- Test Labs ٠
- Instrumentations
- Sub-assemblies

SUPPLEMENTAL DETAILS

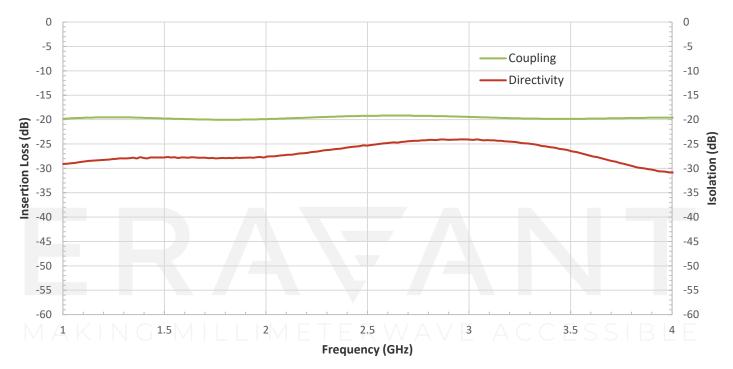


ERAWANT



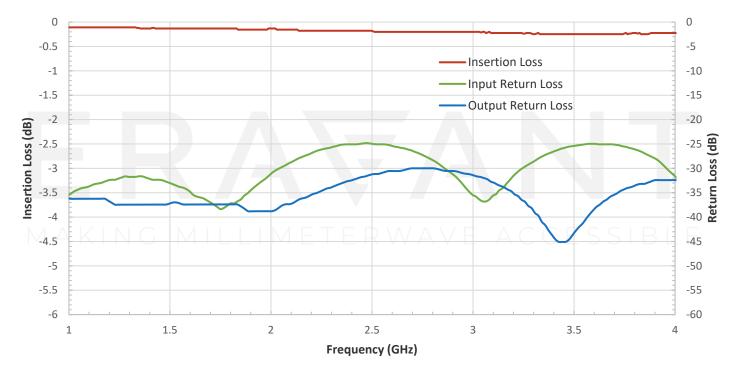
Final Rev 1.0

SCD-0130432020-SF-SC



Typical Coupling and Directivity vs. Frequency

Typical Insertion Loss and Return Loss vs. Frequency

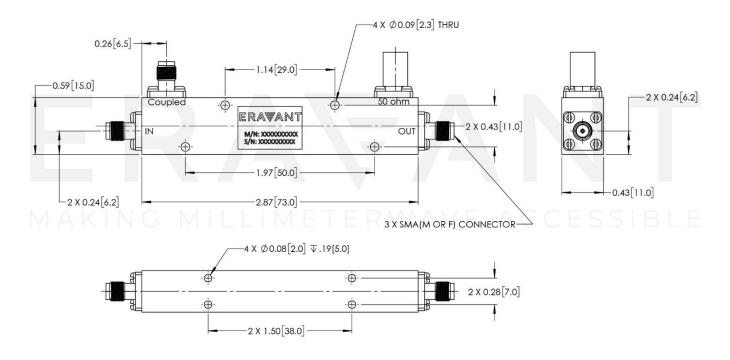


ERAWANT

SCD-0130432020-SF-SC

ERAWANT

Mechanical Outline: (Unless otherwise specified, all dimensions are in inches [millimeters])



NOTE:

- All data presented is collected from a sample lot. Actual data may vary slightly from unit to unit.
- All testing is performed under +25 °C case temperature.
- Eravant reserves the right to change the information presented without notice.

CAUTION:

- Exceeding absolute maximum ratings shown will damage the device.
- Proper torque should be applied: 8.0 ± 0.15 inch-pounds (0.90 ± 0.02 Nm). Torque wrench model <u>SCH-08008-S1</u> is highly recommended.

MAKING MILLIMETERWAVE ACCESSIBLE