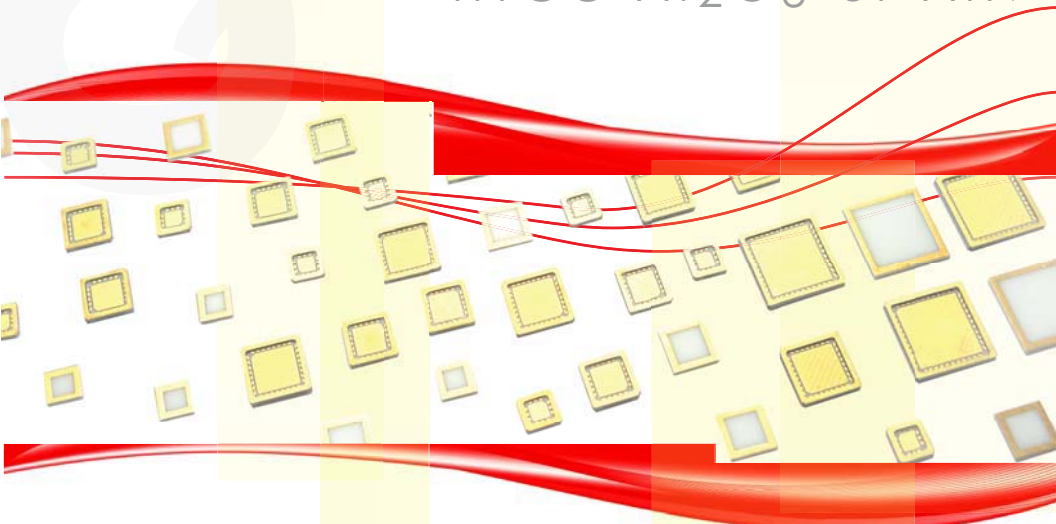


Ceramic **QFN** Family

To 40GHz

HTCC Al₂O₃ or AlN



Fully Hermetic

BARRY



ISO CERTIFIED



ITAR REGISTERED



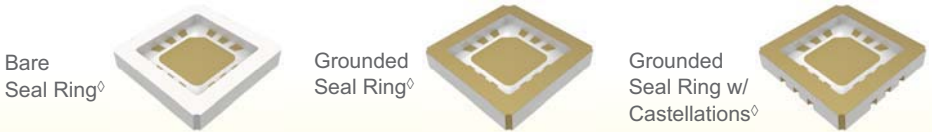
Ceramic QFN Overview

- 6 Sizes: 3mm to 8mm
- HTCC Al₂O₃ or AlN
- Hermetically Sealable
- Air Cavity Design
- Broadband Performance
- RoHS Compliant
- Bare or Grounded Seal Ring
- Optional Castellations
- JEDEC MO-220 Footprint

Ceramic QFN Sizes:

						
Size:	3mm	4mm	5mm	6mm	7mm	8mm
MO-220 Footprint:	VEED-5	VGGD-5	VHHD-5	VJJD-5	VKKD-5	VLLD
Standard Pin Count:	12	20	32	36	44	48

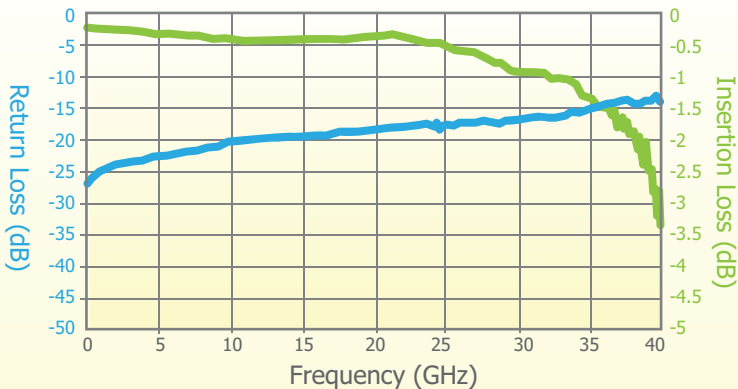
Ceramic QFN Configurations:



[◊]3mm unit shown here

Ceramic QFN Performance Example:

This graph shows typical performance of a **5mm Ceramic QFN from DC-40GHz**. Insertion loss was measured through package with air line over ground plane.





Barry Industries Inc. is a leading manufacturer of ceramic components including attenuators, resistors, terminations, semiconductor packaging and custom thick film circuits.

We are an ISO9001 certified, ITAR registered company with headquarters and manufacturing operations in Attleboro, Massachusetts. We invite you to visit our facility. We know that you will like what we have to show you.

For decades, leading providers of mission-critical devices have relied on Barry components.

-The Barry Team



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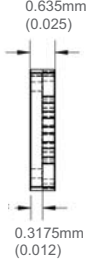
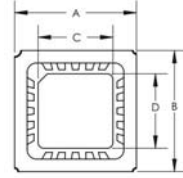
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Ceramic QFN Dimensions:

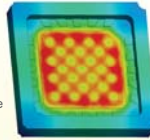
A	B	C	D	Pins
3.0mm (0.118")	3.0mm (0.118")	1.48mm (0.058")	1.48mm (0.058")	12
4.0mm (0.157")	4.0mm (0.157")	2.47mm (0.097")	2.47mm (0.097")	20
5.0mm (0.197")	5.0mm (0.197")	3.49mm (0.137")	3.49mm (0.137")	32
6.0mm (0.236")	6.0mm (0.236")	4.47mm (0.176")	4.47mm (0.176")	36
7.0mm (0.276")	7.0mm (0.276")	5.49mm (0.22")	5.49mm (0.22")	44
8.0mm (0.315")	8.0mm (0.315")	6.48mm (0.255")	6.48mm (0.255")	48



Ceramic QFN Thermal Resistance:

Size	Al ₂ O ₃	AlN
3mm	8.0°C/W	3.0°C/W
4mm	3.0°C/W	1.0°C/W
5mm	1.5°C/W	0.5°C/W
6mm	0.9°C/W	0.3°C/W
7mm	0.6°C/W	0.2°C/W
8mm	0.4°C/W	0.13°C/W

Al₂O₃
5mm QFN
1.5°C/W
Thermal Resistance



AlN
5mm QFN
0.5°C/W
Thermal Resistance









Ceramic QFN Ordering Information:

QFN - 33 12 - 05 01

PN = 3mm QFN with Grounded Seal Ring

Standard Sizes & Pin Counts:

-  **33 12** = 3.0mm² QFN (0.118") with 12 Pins
-  **44 20** = 4.0mm² QFN (0.157") with 20 Pins
-  **55 32** = 5.0mm² QFN (0.197") with 32 Pins
-  **66 36** = 6.0mm² QFN (0.236") with 36 Pins
-  **77 44** = 7.0mm² QFN (0.276") with 44 Pins
-  **88 48** = 8.0mm² QFN (0.315") with 48 Pins

Features:

- 00** = Bare Seal Ring
- 01** = Grounded Seal Ring
- 02** = Grounded Seal Ring w/ Castellations

HTCC Material:

- 05** = Al₂O₃
- 07** = AlN

Many other options & configurations available. Custom requests are our specialty!
All part illustrations are for reference purposes only.



- To 40GHz
- HTCC Al₂O₃ or AlN
- Fully Hermetic



BARRY

Ceramic **QFN** Family

Barry Industries, Inc.
60 Walton St.
Attleboro, MA 02703

US Tel: (508) 226-3350
Outside US Tel: +00 1 (508) 226-3350
Fax: (508) 226-3317

Email: sales@barryind.com

www.barryind.com