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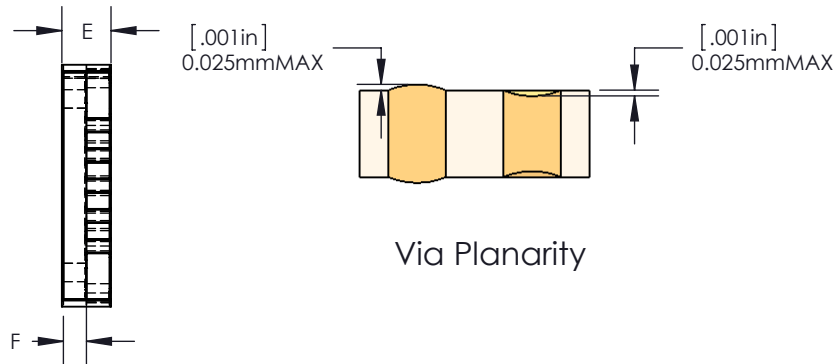
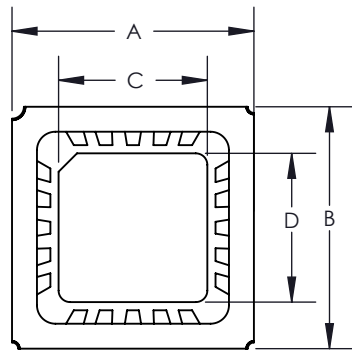
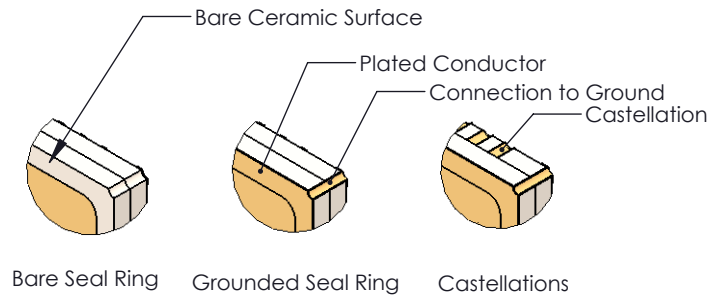
C-QFN Alumina Air Cavity Family

Features

- High Temperature Co-Fire Alumina Body
- Low Loss Broadband Transitions
- Air Cavity
- Low Thermal Resistance
- JEDEC MO-220 Footprint
- 0.5 mm Lead Pitch

Options

- Grounded Seal Ring
- Castellated Pins
- Hermeticity
- NiAu or ENIG or ENEPIG Plating



Dimensions in mm (in)						Pins	Part Number		
A	B	C	D	E	F		Bare Seal Ring	Grounded Seal Ring	Castellations
3.0 (0.118)	3.0 (0.118)	1.48 (0.058)	1.48 (0.058)	0.635 (0.025)	0.3175 (0.012)	12	QFN-3312-0500	QFN-3312-0501	QFN-3312-0502
4.0 (0.157)	4.0 (0.157)	2.47 (0.097)	2.47 (0.097)	0.635 (0.025)	0.3175 (0.012)	20	QFN-4420-0500	QFN-4420-0501	QFN-4420-0502
5.0 (0.197)	5.0 (0.197)	3.49 (0.137)	3.49 (0.137)	0.635 (0.025)	0.3175 (0.012)	32	QFN-5532-0500	QFN-5532-0501	QFN-5532-0502
6.0 (0.236)	6.0 (0.236)	4.47 (0.176)	4.47 (0.176)	0.635 (0.025)	0.3175 (0.012)	36	QFN-6636-0500	QFN-6636-0501	QFN-6636-0502
7.0 (0.276)	7.0 (0.276)	5.49 (0.22)	5.49 (0.22)	0.635 (0.025)	0.3175 (0.012)	44	QFN-7744-0500	QFN-7744-0501	QFN-7744-0502
8.0 (0.315)	8.0 (0.315)	6.48 (0.255)	6.48 (0.255)	0.635 (0.025)	0.3175 (0.012)	48	QFN-8848-0500	QFN-8848-0501	QFN-8848-0502

Barry Industries reserves the right to change part number and process without notification

Barry Industries, Inc., 60 Walton St., Attleboro, MA 02703 T: 508-226-3350 F: 508-226-3317 E-mail: sales@barryind.com

Barry Industries maintains an ISO 9001 Certified Quality Management System

Origination Date	Revision Date	Rev.
07 Oct 2013	30 Oct 2013	0.2

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Specifications

Parameter	Min	Typ	Max	Unit
Frequency Range	DC		40	GHz
Return Loss DC - 12.4 GHz	20			dB
Return Loss 12.4 - 18 GHz	17			
Return Loss 18 - 35 GHz	15			
Return Loss 35 - 40 GHz	12.5			
insertion Loss DC - 12.4 GHz			0.5	dB
Insertion Loss 12.4 - 18 GHz			0.5	
Insertion Loss 18 - 35 GHz			1.5	
Insertion Loss 35 - 40 GHz			4	
Classification Temperature (J-STD-020)		260		°C
Helium Leak Rate			10 ⁻⁸	atm-cc/sec

Parameter	Min	Typ	Max	Unit
Thermal Resistance				
3mm		8		°C/W
4mm		3		
5mm		1.5		
6mm		0.9		
7mm		0.6		
8mm		0.4		

Parameter	Pins	
JEDEC MO-220 Variant		
3mm	12	VEED-5
4mm	20	VGGD-5
5mm	32	VHHD-5
6mm	36	VJJD-5
7mm	44	VKKD-3
8mm	48	VLLD

Characteristic	Standard	Method	Condition
Physical Dimensions	MIL-STD-883	2016	
Workmanship	JEDEC JESD9B		
Solderability	MIL-STD-883	2003	+245±5°C
Thermal Shock	MIL-STD-883	1011	C
High Temperature Bake	MIL-STD-883	1008	1h@+150°C
Lead Integrity	MIL-STD-883	2004	D
Seal	MIL-STD-883	1014	A4 Unlidded cases
Metal Package Isolation	MIL-STD-883	1003	600VDC-100nA MAX

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