

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Microwave Absorber Board Level Shield



Microwave Absorber Board Level Shield

Laird Technologies Microwave Absorber Board Level Shields (ABLS) technology for EMI shielding solutions utilizes a combination of Q-Zorb RFSW surface wave absorbers and board level shields to create a product design to meet specific application requirements.

Q-Zorb RFSW surface wave absorbers are thin, magnetically loaded elastomeric sheets designed to provide emi protection at high angles of incidence for surface wave attenuation.

Board level shields provide isolation of board level components, minimizes crosstalk and susceptibility without impacting system speed. This combination product incorporates a stamped metal housing and an absorbing elastomer that is designed to meet the specific needs of your application.

For sales information

In Asia please telephone +86 755 2714 1166
In Europe please telephone +49 8031 2460 0
In the USA please telephone +1-800-843-4556

or visit: www lairdtech com

Features and Benefits:

- ABLS has enhanced shielding effectiveness at frequencies from 1 – 40 Ghz
- Use inside of microwave housings to reduce internal resonance and lower the "Q" of the microwave cavity
- Minimizes crosstalk and susceptibility without impacting system speed
- Effective in isolating antennas from ground plane reflections
- Custom shapes and other material options are available
- Provides isolation of board level components
- Low height down to 0.04" (1,0mm) to accommodate mother/daughter board configurations
- Secure cover design is ideal for applications that could be subject to shock and vibration

Applications

- Any application requiring board level shielding
- Wireless handsets, PC cards
- High frequency communications equipment, basestations
- PDAs
- Desktop and laptop computers
- Portable and non-portable electronic devices









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Microwave Absorbers

Q-Zorb RFSW surface wave absorbers are thin, magnetically loaded elastomeric sheets designed to provide attenuation at high angles of incidence for surface wave attenuation. They are nominally manufactured in the thickness range of 0.010" to 0.125" (0.4mm to 3.2mm).

The elastomeric-based absorbers are available in a variety of choices. All of the parts utilized in our ABLS product offering utilize our silicone elastomer which has a wide temperature range $(-60^{\circ}F - 350^{\circ}F)$.

Each of these products offers a UL-VO rating and is RoHS compliant.

In the ABLS product offering, the absorber material is acting to reduce internal resonances which often occur at higher frequencies. Although the data listed below shows electrical performance from 2-18 GHz, the material offers shielding effectiveness from 1-40 GHz.

Standard Surface Mount Shields Two-Piece

Two-piece board level shields offer users the flexibility to inspect or repair shielded components without having to risk board damage by removing the entire shield or incur any tooling costs. Covers snap on and off with ease, which makes repair of the component under the shield quicker and easier and reduces board re-work. Two-piece shields are available unassembled*, and are designed to survive drop, shock and no-rattle tests.

*Pre-assembly is an option. Consult Sales.

Standard Two-Piece Board Level Shields

| Part Number | Surface Area | Overall Dimension | Overall Frame | Tape Width | Tape Pitch | Parts Per Reel | Weight (FR) | Weight (CY) |
|----------------|-------------------|----------------------------------|------------------|---------------|---------------|-------------------|----------------|----------------|
| BMIS-201-F | .253² (163.10²) | .538 x .476 (13.66 x 12.10) | .100 (2.54) | 24 mm | 20 mm | 1000 | 0.3 g | 0.2 |
| BMIS-202-F | .402² (259.21²) | .650 x .650 (16.50 x16.50) | .142 (3.60) | 32 mm | 24 mm | 700 | 0.5 g | 0.4 |
| BMIS-203-F | 1.033² (666.16²) | 1.032 x 1.032 (26.21 x 26.21) | .200 (5.08) | 44 mm | 32 mm | 300 | 1.0 g | 0.8 |
| BMIS-204-F | 1.548² (998.56²) | 1.260 x 1.260 (32.00 x 32.00) | .236 (6.00) | 44 mm | 36 mm | 225 | 1.6 g | 1.1 |
| BMIS-205-F | 1.461² (942.50²) | 1.500 x 1.000 (38.10 x 25.40) | .236 (6.00) | 56 mm | 44 mm | 250 | 1.6 g | 1.1 |
| BMIS-206-F | 1.879² (1212.392) | 1.450 x 1.326 (36.83 x 33.68) | .200 (5.08) | 56 mm | 40 mm | 300 | 1.5 g | 1.3 |
| BMIS-209-F | 2.997² (1933.36²) | 1.747 x 1.747 (44.37 x 44.37) | .384 (9.75) | 56 mm | 56 mm | 120 | 3.2 g | 3.1 |
| BMIS-210-F | 2.080² (1342²) | 1.732 x 1.201 (44.02 x 30.50) | .118 (3.00) | 56 mm | 40 mm | 450 | 1.0 g | 2.6 |

Material Options

| Part Number | Product Category | Elastomer Type | Thickness in (mm) | Frequency (GHz) Range |
|----------------|---------------------|-------------------|----------------------|--------------------------|
| 2960 | RFSW | Silicone | 0.010" (0.3) | 12-18 |
| 2234 | RFSW | Silicone | 0.020" (0.5) | 12-18 |
| 2236 | RFSW | Silicone | 0.030" (0.8) | 12-18 |
| 2238 | RFSW | Silicone | 0.040" (1.0) | 8-12 |
| 2296 | RFSW | Silicone | 0.050" (1.3) | 8-12 |
| 2240 | RFSW | Silicone | 0.060"(1.5) | 8-12 |
| 2257 | RFSW | Silicone | 0.080" (2.0) | 4-8 |
| 2272 | RFSW | Silicone | 0.100" (2.5) | 2-4 |
| 2242 | RFSW | Silicone | 0.125" (3.2) | 2-4 |

Typical Material Performance



*Please consult sales and order the standard shield part number (BMIS-XXX-X) and note the addition of the absorber part number (XXXX).

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