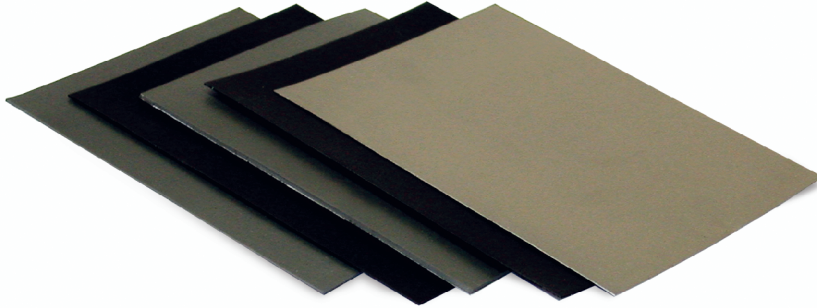
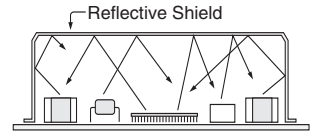


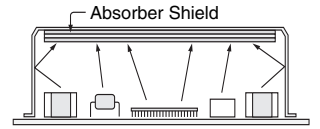
## radio frequency interference absorbers

Radiowaves emanating from electronic components such as the printed circuit board sketch at the right are addressed in three ways: sometimes no shielding is required; a reflective shield in the form of a local cover for the components, or the entire electronic enclosure can be fitted up as a shield; an absorber pad shield which soaks up the RF and converts it to imperceptible heat energy.

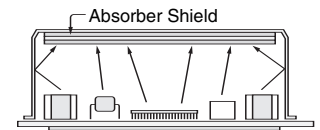
The latter Absorber Shield method deals with the unwanted radiowave energy right at the source and prevents re-radiation and reflection of the signals so that neighboring components are unaffected and higher order harmonics are reduced.



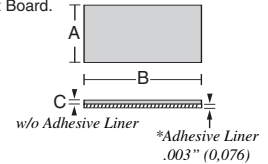
Typical shielding approach allows reflected radiation to affect neighboring components.



Noise absorber approach assimilates radiated frequencies and converts to imperceptible heat energy.



Absorbers shown in use below and above Printed Circuit Board.



## RFID shielding patches®

**FOR PCB COMPONENTS AND WIRE CIRCUITS.** A quick and easy way to gain 1 to 2 dB without invasive circuit changes. The EA3200H RF absorber matrix provides a measurable effect from 10MHz to 6.0GHz depending on frequency, existing circuit load, and area covered by the patch®. Peak performance is from 3.2GHz to 6.0GHz. Installs simply by removing protective adhesive liner. Convenient 6.00" x 8.00" (152 x 203mm) sheets with (24) patches per sheet.

| PART No.     | A         | B          | C         | Frequency - Attenuation                         |
|--------------|-----------|------------|-----------|-------------------------------------------------|
| EA3200H-SP12 | 1.00 25,4 | 1.937 49,2 | .005 0,13 | 10MHz - 6.0GHz: peak @ 3.2GHz - 6.0GHz @ 31.2dB |

## RFID absorber shielding material

Sheet material formulated for specific frequency RFID applications. Adhesive backing.

### applications:

PCB's, PCB components, electronic enclosures, shielded boxes, all microprocessor based electronics, EDP, telecom, scientific, medical, architectural shielding, RF test chambers, shielded facilities

| Material Characteristic      | Measure                                          |
|------------------------------|--------------------------------------------------|
| Frequency range              | 10MHz - 6.0GHz                                   |
| Peak frequency               | 13.56MHz, 860-930MHz, 433.92MHz, 2.45GHz, 5.8GHz |
| Temperature range            | -20°C to 110°C                                   |
| Flammability rating          | UL94-V0                                          |
| Adhesive: temperature tack   | -18°C to 83°C                                    |
| shear                        | 8.4 p.s.i. (stainless steel standard)            |
| Dimensions: standard maximum | 300+ hrs. @ 2 p.s.i. @ 22°C                      |
|                              | see chart below                                  |
|                              | 3'-0" W x 65'-0" L x .138" max                   |

| PART No. | Target Frequency | Width       | Length*         | Thickness | Frequency Range           | Peak Frequency - Attenuation |
|----------|------------------|-------------|-----------------|-----------|---------------------------|------------------------------|
| EA100    | High 13.56MHz    | 15.75 400,0 | 15.75 400,0 (1) | .002 0,05 | -5dB min. @ 10MHz to 1GHz | 100 MHz @ -17.3 dB           |
| EA400    | UHF 433.92MHz    | 15.75 400,0 | 15.75 400,0 (1) | .012 0,30 | -5dB min. @ 50MHz to 1GHz | 400 MHz @ -17.2 dB           |
| EA800    | UHF 860-930MHz   | 15.75 400,0 | 15.75 400,0 (1) | .014 0,36 | -5dB min. @ 50MHz to 1GHz | 800 MHz @ -17.9 dB           |

| PART No.          | Target Frequency | Width      | Length*         | Thickness | Frequency Range | Peak Frequency - Attenuation |
|-------------------|------------------|------------|-----------------|-----------|-----------------|------------------------------|
| EA3200            | wideband         | 8.25 209,6 | 15.75 400,0 (2) | .005 0,13 | 10MHz to 6.0GHz | 3.2GHz to 6.0GHz @ -31.3db   |
| EA3200H (hi temp) | 40MHz - 6.0GHz   | 8.25 209,6 | 15.75 400,0 (2) | .005 0,13 | 10MHz to 6.0GHz | 3.2GHz to 6.0GHz @ -31.3db   |

| PART No. | Target Frequency  | Width       | Length*         | Thickness | Frequency Range | Peak Frequency - Attenuation |
|----------|-------------------|-------------|-----------------|-----------|-----------------|------------------------------|
| MA24     | microwave 2.45GHz | 7.875 200,0 | 15.75 400,0 (3) | .138 3,5  | 2.2 - 2.6GHz    | 2.45GHz @ -21.0dB            |
| MA58     | microwave 5.8GHz  | 7.875 200,0 | 15.75 400,0 (3) | .100 2,6  | 5.5 - 6.2GHz    | 5.8GHz @ -23.5dB             |

(1)\*Available in standard rolls 15.75 400mm x 65'-0" 20M (2)\*Available in standard rolls 8.25 210mm x 65'-0" 20M (3)\*Available in sheets only

## typical absorption rate by part number

