



# SSX™ DIAPHRAGM

## Truextent® Replacement Diaphragms for JBL and RADIAN

The SSX™ Precision Diaphragm has been engineered to fit a variety of JBL and RADIAN compression drivers. Each replacement diaphragm provides high efficiency and clarity of sound with extended bandwidth compared with the factory original or other aftermarket diaphragms. All SSX diaphragms deliver superior reliability, longevity and value.

The domes are formed from Truextent® brand genuine Acoustic Beryllium and bonded to pure aluminum edgewound voicecoils with a Kapton® former utilizing a proprietary bonding methodology. Acoustic Beryllium has the highest stiffness-to-mass ratio of all commercial dome materials. This ratio allows the diaphragm to have a low overall moving mass, which greatly improves responsiveness, while remaining rigid over a wide frequency range and thus eliminating the "breakup" associated with the mechanical deformation of traditional dome materials at their resonate frequencies.

The SSX suspension is constructed from a proprietary polymer, rather than a metal one-piece dome and surround, which enhances the reliability and eliminates metal fatigue that destroy traditional driver diaphragms. This unique polymer surround was designed to provide excellent dampening of the voice coil and diaphragm assembly for smooth, low distortion linear output with excellent transient response.



- Available for JBL and RADIAN  
2" & 1½" Drivers
- Truextent Brand Acoustic Beryllium
- Superior Reliability
- Extended Lifespan
- Clarity of Sound
- Precision Tolerances
- Consistency -- Easy to Match Sets

### ELECTROFUSION

44036 South Grimmer Boulevard  
Fremont, CA 94538-6346  
+1.510.623.1500  
truextent@materion.com

### MATERION CORPORATION

[www.materion.com/electrofusion](http://www.materion.com/electrofusion)

SSX is a trademark, and Truextent is a registered trademark of Materion Brush Inc.

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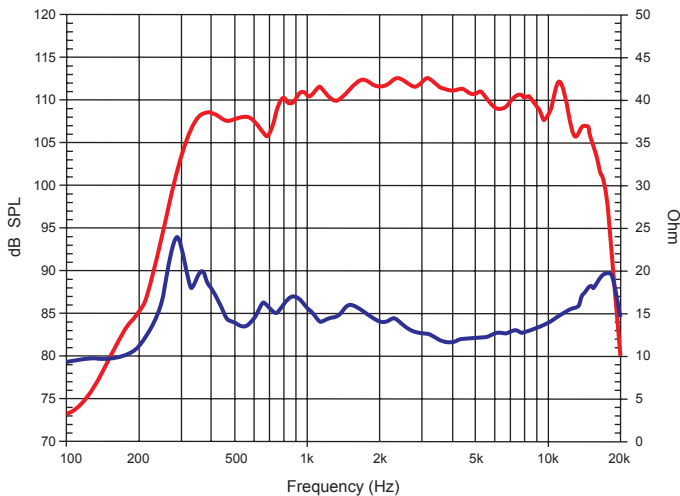


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## SPECIFICATIONS

Frequency Response..... 500Hz - 20kHz  
 Maximum Power Handling \* ..... 100W continuous above 1kHz  
 ..... 150W peak  
 Sensitivity † ..... 111dB, one Watt at one meter  
 Recommended Crossover..... 500Hz, 24dB/octave  
 ..... 1,000Hz, 12dB/octave  
 Nominal Impedance (Be4016 / Be4008)..... 16 / 8 ohms  
 Minimum Impedance (Be4016 / Be4008)..... 12 / 5 ohms  
 D.C. Resistance (Be4016 / Be4008)..... 8.1 / 4.2 ohms (± 8%)  
 Voice Coil Diameter..... 4" (100mm)  
 Voice Coil Material..... Edgewound Aluminum  
 Diaphragm Material ..... Pure Truextent Acoustic Beryllium  
 Diaphragm Suspension..... Proprietary Polymer  
 Polarity ..... Positive voltage at + terminal moves  
 .....diaphragm towards phase plug  
 Dimensions ..... 5.0" (127mm) diameter  
 ..... 1.0" (25.4mm) deep

\* AES2-1984-r2003 through a 1kHz, 12dB/octave crossover  
 † Measured on a JBL 2446J driver with a JBL 2386 horn with a 1.0V<sub>rms</sub> input



Amplitude and Impedance vs Frequency of SSX Be4016 diaphragm measured on a JBL 2450J driver and 2386 horn at 1W/m.

Make	Driver Model	SSX Replacement	Original Factory Diaphragm
JBL	2440	Be4016	D16R2440
JBL	2441	Be4016	D16R2441
JBL	2445H	Be4008	D8R2445
JBL	2445J	Be4016	D16R2445
JBL	2446H	Be4008	D8R2450
JBL	2446J	Be4016	D16R2450
JBL	2447H	Be4008	D8R2450
JBL	2447J	Be4016	D16R2450
JBL	2450H	Be4008	D8R2450
JBL	2450J	Be4016	D16R2450
JBL	2451H	Be4008	D8R2450
JBL	2451H-I	Be4008	D8R2450
JBL	2451J	Be4016	D16R2450
JBL	375H	Be4016	D16R2440
JBL	376H	Be4016	No Longer Available
JBL	5A360	Be4016	D16R2440
JBL	5P350	Be4016	D16R2440
JBL	5P360	Be4016	D16R2440
JBL	M111427	Be4016	D16R2440
RADIAN	950-PB/8	Be4008	I245-8
RADIAN	950-PB/16	Be4016	I245-16

Since 1990, Brush Wellman Electrofusion Products has been supplying Acoustic Beryllium to the majority of transducer manufacturers who utilize real beryllium in their designs. We currently supply 100% of the Truextent® brand Acoustic Beryllium domes and foils around the globe.

Beginning in 2007, we expanded our acoustic manufacturing expertise and developed the capability to produce compression driver diaphragm assemblies. Available as an off-the-shelf aftermarket replacement or as full-custom OEM components in production quantities, we have combined premiere materials and design practices with our 40+ years of precision manufacturing experience and supply chain management to yield the ultimate in diaphragm assemblies.

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