Subject: compression driver Q
Posted by Halfront on Tue, 18 Nov 2008 19:16:47 GMT
View Forum Message <> Reply to Message

Why are the diaphragms of compression drivers dome shaped instead of flat? If the goal is a plane wave wouldn't a flat membrane be better than a dome?

Subject: Re: compression driver Q
Posted by Duke on Sat, 22 Nov 2008 03:03:15 GMT
View Forum Message <> Reply to Message

For one thing, a dome is much more rigid. A flat diaphragm would be in breakup mode beginning at an unacceptably low frequency, or if made sufficiently rigid (perhaps via honeycombing) would not have adequate top-end extension because of mass roll-off.I presume the phase plug plays a role in tweaking the shape of the wavefront; hopefully somebody who can speak to that with authority will post.Duke