
Subject: Loudspeaker overcurrent protection
Posted by [dB](#) on Thu, 16 Feb 2006 12:27:01 GMT

[View Forum Message](#) <> [Reply to Message](#)

Hi Wayne, I want to take the opportunity to ask if you tested and used PTCs and PolySwitch® before for protection of the HF drivers. What was your impression of them? Should I point for PTC amperage and triggering at half the wattage RMS or (half) the max. handling watts of the driver. I can use the initial resistance values (at 20°, before tripping) and enter them in SPICE, say .31 min and .48 max (for RXEF065 Polyswitch coupled with a 45Wrms driver) in series, averaging between .25 and .75 Ohms (for RXEF050 and RXEF075). Is the time to trip, 4/5 seconds too much for the driver to handle, just in case? From your perspective when installed in the X-over circuit do they (PTCs) alter the sound quality in any way? From your point of view the use of a fuse (series with the PTC) or a lamp (in parallel) 'a la Eminence' is a good idea? What is the best protection set-up? (>custom-built aerospace lamps as positive temperature coefficient series varistors: Eminence PX SERIES pro x-overs) Best Regards

Subject: Re: Loudspeaker overcurrent protection
Posted by [Wayne Parham](#) on Thu, 16 Feb 2006 17:25:21 GMT

[View Forum Message](#) <> [Reply to Message](#)

I wouldn't be comfortable with a 4 second trip time, no. One thing that's kind of cool about lamp filaments is that they increase resistance as they heat up and start to glow, so they introduce increasingly more compression as power goes up.
