
Subject: C1, 4.7uF cap

Posted by [colinhester](#) on Sun, 23 Jan 2005 00:49:45 GMT

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Is there a minimum voltage rating? Can someone please make a little friendly suggestion as to what might possibly sound best?

<http://audioroundtable.com/GroupBuild/messages/179.html>

Subject: Re: C1, 4.7uF cap

Posted by [PakProtector](#) on Sun, 23 Jan 2005 01:46:17 GMT

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No problem! I like the ASC motor run. 440VAC/7.5 uF at ~\$8 each from Allied Electronics. Slight preference to the lower voltage versions, but at a slight size penalty. It is what I have been running since Rev. 2 and I have tried a bunch of things. The ASC keep going back in.regards,Douglas

Subject: Re: C1, 4.7uF cap

Posted by [Manualblock](#) on Sun, 23 Jan 2005 01:58:37 GMT

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I have good luck with Allied. Julia is very helpfull. That cap is the output coupling cap; is that correct? If so would it be possible you might walk us through the Ohm's law math required to find that value? I understand if it is too much but I am attempting to access the Radiotron theory and struggling due to lack of math skills. I also happen to have the NEETS program I ordered a while ago. Anything pertinent in there. I see you have used it twice now. Thanks Douglas. We are very hyped about the 807 amp project to pair with the pre.I have traded my EAR el 859 in order to do PP and this is right up the alley.

Subject: C1, 7.5 uF/440VAC

Posted by [PakProtector](#) on Sun, 23 Jan 2005 02:21:51 GMT

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it is indeed the output coupling cap. Since the impedance of a cap is $1/j\omega C$, we want the cap as large as is sonically reasonable. Forget about j and root negative 1. It is the real part of this we will look at. At 20 cps, ω is $2\pi \cdot 20$ radians per second and C is $7.5 \cdot 10^{-6}$.this yeilds 1061.03295 Ohms. At 40 cps, it is half that, and at 80 cps, half of that. This is close enough to the 10:1 ratio of input impedance to output impedance which keeps us from rolling off too early, even

with a 10kOhm SS amp. For a 100kOhm Valve amp and several tens of pF of cabling capacitance, we're still good.regards,Douglas

Subject: Re: C1, 7.5 uF/440VAC
Posted by [Manualblock](#) on Sun, 23 Jan 2005 12:59:36 GMT
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Excellent; thanks again!

Subject: How's this cap?
Posted by [colinhester](#) on Mon, 24 Jan 2005 20:24:07 GMT
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It's rated at 370V, not 440V? Price is right....Colin
<http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=3869528616&fromMakeTrack=true>

Subject: That is a *FINE* cap...
Posted by [PakProtector](#) on Mon, 24 Jan 2005 21:29:49 GMT
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rock on me old Mate, that'll do just fine.regards,Douglas
