
Subject: Re: X-over Cap Voltage rating
Posted by [Wayne Parham](#) on Fri, 16 Jul 2010 23:03:54 GMT
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That's a tough question. Common sense makes it seem that's true, since series components are in the signal path and shunt components aren't. Seems like maybe they're more "important". But considering even shunt reactances form "bleeders", if one is way off, you have a real problem. For this reason, I'd prefer that all be good components.

Think of the analogy of a fork in a stream. The series path is like a large stream having the majority of flow and the shunt path is like a smaller branch going somewhere else. If everything is right, you can expect the proportions of flow to be consistent. But if something changes either branch, the proportion is affected, ultimately having an impact on the larger "series" flow. If the minor "shunt" or bypass branch starts taking a heavier-than-normal flow, then the main "series" path is reduced. If the bypass is dammed up, then the series path takes more flow than normal. Either way, the main signal is modified by a disturbance in the branch.