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Subject: Re: Replacing Selenium

Posted by [Wayne Parham](#) on Mon, 16 Mar 2009 18:37:31 GMT

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The forward voltage drop across a selenium rectifier plate is approximately 0.5v - 1.0v, so you could count the plates to estimate the drop produced by the stack. I have selenium stack in my TransOceanic radios. I'll power one of them up and measure across it. As I recall, the voltage drop was not huge - like a few volts, maybe 10. It would be similar to a series string of germanium or silicon diodes, each having 0.3v to 0.7v across it, each adding to the total voltage drop. You could mimic this behavior with a series string of more modern semiconductor rectifiers or a diode and resistor. If the circuit is low voltage, like a filament circuit, I might be inclined to do that. But if it's the B+ supply, I think that the DC voltage desired is probably high enough that a few volts loss isn't required for proper operation. In that case, I think you probably could replace it with a single diode having less than a volt drop across it.

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