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.