
Subject: Re: K200A-1 Power Amp Rescue Needed
Posted by [thetragichero](#) on Sat, 18 May 2019 14:40:06 GMT
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after consulting some datasheets i've replaced the se4002 with bc547b (these even tested right around the same hfe) as i have a ton (one of the guys from the diy fx forum often uses them as clipping diodes). i did not have anything suitable for the pnp transistor so i just left it alone channel 1 preamp now is loud and clean (rca monitor out jack was replaced with a more useful 1/4 before i received this unit, but yes it works both ways)

i am now convinced that i have purchased counterfeit 2n3055s. besides the fact that the part of the case where the part number is located has silver paint applied over it (looks like they were dipped) and the 2n3055 markings are "upside down" on some of them, they were 70 cents apiece with shipping whereas mouser charges ~5 bucks apiece. i played the amp with the 2n3232 in it for at least 20 minutes without any issue, and comparing their datasheets that *should* be the inferior part. the 2n3055 seem to last a matter of minutes before failing (i've had one or two q6 end up with a short between collector and emitter) and drawing too much current through the 100R resistors. unhooking the power resistors (which i did after i burned through the first set) everything else checks out on the power amp board, voltages etc. so (knock on wood) the most expensive parts (those driver transistors) appear to be okay

i've run out of 1w metal film so i decided to stop messing around on ebay and placed a small mouser order for 2% 100R 1W metal oxide resistors along with 2% 1R 5W resistors. will replace my smokey resistors and reinstall the 2n3232 (even their casing seems more rugged - these are cast while the 2n3055s were made from sheet metal)

i'm not as angry about all this as i was the other day, as i have at least reasoned through some of this
