



VB1ab = ECC83 / 12AX7

VR1 = ALPHA100KX2

**AUREXX CRYSTAL 1 (2011)**  
 mod-0: no NFB: Ao=667; Z-out=45 Ohm; 42Hz-35kHz (-3dB). With NFB: at edge of instability (13-4)  
 mod-1: R1,2,9,10=1M-1/2W; R11,12=150E-1W (14-4)  
 mod-2: Separate chassis = mains from audio ground add R17=27E/1W and C8=100nF/630V (15-4)  
 mod-3: add R18,19=1M-1/2W; no NFB. Z-out=3 Ohm; Ao=24; 10Hz-37kHz (-3dB); Pmax=2.9W (28-4)  
 mod-4: with FB+C9,10=180pF-Styro.. Z-out=1.2 Ohm Ao = 8; 4Hz-60kHz (-3dB); Pmax= 3.4W (11-5)  
 mod-5: C3,4 = 22uF/63V for first order behavior (18-5)