

NJR Op-Amps - A Smart Choice For Audio Applications

NJRC enjoys a solid reputation in the audio industry and delivers a wide array of products for that market. In the category of bipolar operational amplifier, NJRC offers cost-effective and versatile series of products with specifications that are geared toward the audio market. NJRC's NJM2058/59/60 and the NJM4558/59/60 Series in quad and dual circuit configurations, respectively, are used for a variety of audio applications including professional and consumer audio systems by such names as ADA Signal, Bose, Crest Audio, Digi Design, and Jazz Multimedia. These products are ideally suited for audio applications typically requiring low harmonic distortion, low noise characteristics, and high slew rate. The performance is improved with the increasing number making the 2060 and 4560 the top performers in the series.

Moreover, the strength of these products is their ability to fulfill the key customer needs:

◆ Performance

- Typical input offset voltage of 0.5mV representing good voltage symmetry
 - High Typical Voltage Gain of 100 dB
 - Typical Input Common Mode Voltage of +/-14 V allowing greater operating voltage range
 - Good Unity Gain Bandwidth (f_{-}) ranging from 3 to 10 MHz for NJM2058 to NJM2060, respectively, confirming ability of the amplifier to deliver gain at a higher frequency
 - Typical Common-Mode Rejection Ratio (CMR) and Supply Voltage Rejection Ratio (SVR) of 90dB
 - Low Noise Input Voltage of 1.4 and 1.2 μ Vrms at the RIAA low pass filter test circuit for NJM2058/4058 and NJM2060/4560 amplifiers, respectively
- Slew rate ranging from 1 to 4 V/usec for NJM2058/4058 to NJM2060/4060, respectively

◆ Stable Delivery

- ⇒ These products offer a high manufacturing yield and great availability: standard lead time for production volume is 10 - 12 weeks

◆ Quality

- Reliable bipolar manufacturing process eliminates "popcorn" noise, a common concern in audio amplifiers
- Target quality yield: **1PPM**

◆ Price

- ⇒ NJM20XX and NJM45XX Series are *aggressively* priced: for pricing information, please consult NJRC Sales Department

Thus, NJM2058/59/60 and NJM4558/59/60 Series operational amplifiers prove to be an intelligent choice for diverse range of audio applications.