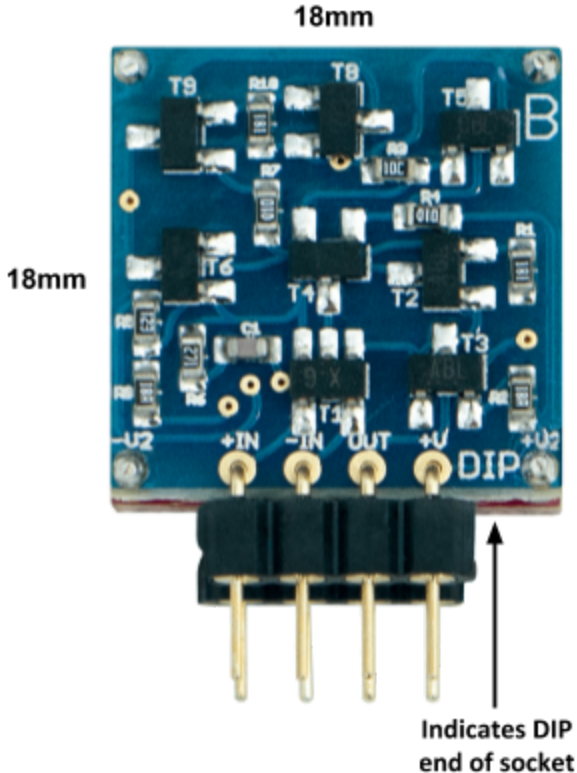


# ORANGE

## DUAL DISCRETE OP-AMP



The **Orange Dual Discrete Op-amp** is specially designed for audio and is among the most musical sounding dual discrete op-amps out there. It is available in DIP 8 format and can be used in any CD player, DAC, or preamplifier that currently runs DIP 8 based IC dual op-amp types.

The overall soundstage and transient detail will be greatly improved when used in pretty much all audio equipment that it can physically be fitted to.

It has a very low noise Jfet front end so it can run high input impedances if needed. The equipment it is being used in has to have 22 mm of height clearance and 5 mm side clearance (per side). Please check that the PSU can supply the extra current needed, especially if replacing more than one existing IC op-amp with this op-amp, as with all discrete types, they do draw more current. Replaces the following:

**TL072, NE5532, LM4562, OPA2604, OPA2134, OP275,**

**MUSES 01, MUSES 02, MUSES 8820, MUSES 8920,  
OPA2228**

# Specifications

MAXIMUM RATINGS & SUPPLY VOLTAGE	MINIMUM: +/- 4.5V   TYPICAL: +/-15V   MAXIMUM: +/-18V
OPERATING AMBIENT TEMPERATURE	-25 – 50 DEGREES C
STORAGE TEMPERATURE RANGE	-60 DEGREES TO 80 DEGREES C
QUIESCENT CURRENT (+/- 15V)	18MA
INPUT OFFSET VOLTAGE (+/- 15V)	0.2MV
INPUT OFFSET CURRENT (MA)	MINIMUM: 0.05MA   TYPICAL: 0.1MA   MAXIMUM: 0.15MA
INPUT BIAS CURRENT (UA)	MINIMUM:110UA   TYPICAL: 190UA   MAXIMUM: 300UA
Open Loop Gain (dB)	112dB
Open Loop Bandwidth (RL=600 Ohms)	48Khz
Gain Bandwidth Product (@ 100kHz)	50MHz
Slew Rate (f = 10KHz; RS = 2K)	50MHz
Input Resistance (K Ohm)	50M Ohms
Crosstalk Distortion (f = 1KHz; RS = 600 Ohms)	>90dB
Total Harmonic Distortion (% 1KHz @ 2V Output RL=600 Ohms)	0.002%
Output Impedance (AV = 30dB Closed Loop f = 10KHz, RL = 600 Ohms)	0.3 Ohms