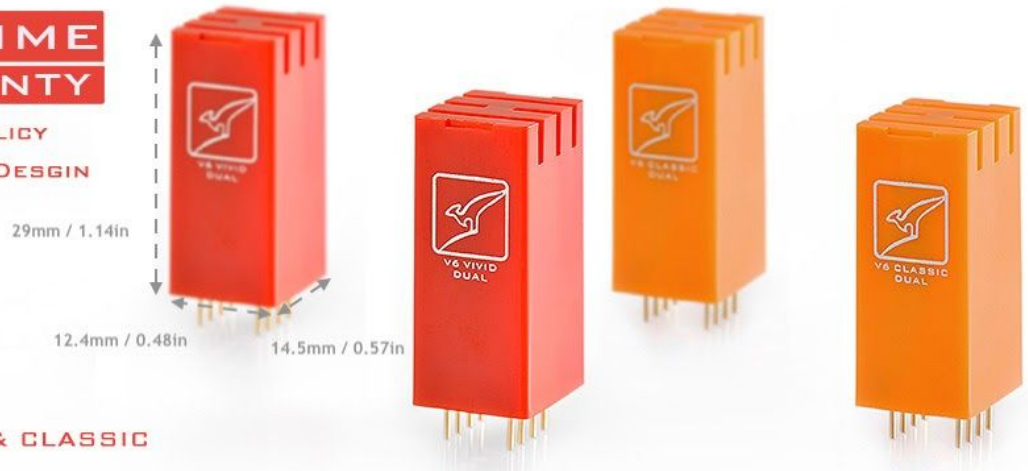




30 DAYS REFUND POLICY
SUPREME QUALITY & DESIGN



BURSON V6 VIVID & CLASSIC

Supreme Sound Opamp V6 Datasheet

The Supreme Sound Opamp (SS Opamp) is a specialized, single-purpose opamp for high-quality analogue audio amplification.

Unlike the general-purpose IC opamp designs, which focus on the high open-loop gain, Burson aimed to achieve low open-loop distortion, low noise, low drift and low offset. The Supreme Sound Opamp also exhibited a wider bandwidth and wide power supply range. These qualities are essential in high-quality analog audio amplification.

The input stage features a pair of carefully matched field-effect transistors. Each pair of transistors went through two stages of screening to ensure the best possible matching. The main amplification section employed a current mirror configuration instead of the conventional voltage amplification. By keeping the current limiting resistor to a minimum value we minimized RC parameter of the circuitry and hence achieved a wider frequency response.

Another pair of matched output transistors is coupling with the emitter follower stage. This arrangement ensured high driving current and low output impedance, which made the SS Opamp suitable for a wide range of audio applications.

Absolute Maximum Ratings	Measurement		
	Min	Typ	Max
Supply Voltage	+/-3 V	+/-15V	+/- 17V
Operating Ambient Temperature	-25°C		52°C
Storage temperature range	-65°C		80°C
DC Characteristics			
	Conditions	Testing Temperature 25°C Supply Voltage +/-15V	
Quiescent Current (mA)		Single 8mA Dual 16mA	
Input offset voltage (mV)	$R_s = 0$	0.007mV	0.13mV
Input offset current (mA)		0.05mA	0.1mA
Input BIAS current (μ A)		101 μ A	270 μ A
Common-Mode Rejection Ratio			99dB
Power Supply Rejection Ratio			11 μ V/V

AC Characteristics	Conditions	Testing Temperature 25°C Supply Voltage +/-12V		
Open-loop gain (dB)			70dB	
Open-loop bandwidth (dB)	RL=600 Ω		46Khz	
Gain Bandwidth Product (MHz)	@ 100KHZ		52 MHz	
Slew Rate (V/μS)	f = 10kHz; RS = 2K Ω	36V/μS		49V/μS
Input Resistant (KOhm)			50M Ω	
Crosstalk distortion (dB) (Dual Opamp)	f = 1kHz; RS = 600 Ω		>93dB	
Total Harmonic Distortion (%) 1Khz @ 2V output	1Khz @ 2V output ; RL=600 Ω		0.02%	
Output Impedance (Ohm)	AV = 30dB Closed-loop f = 10kHz, RL = 600 Ω		0.5 Ω	