

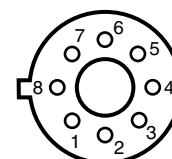


FLH0002H/883 Product Data Sheet

High Current, Linear Operational Amplifier
In A Hermetic 8-Lead Package



Pin Connections
Top View



Pin Connection

Pin 1: V_{1+}
Pin 2: V_{2+}
Pin 3: E_3
Pin 4: Output
Pin 5: E_4
Pin 6: V_{2-}
Pin 7: V_{1-}
Pin 8: Input

HIGH CURRENT, LINEAR OPERATIONAL AMPLIFIER IN A HERMETIC 8-LEAD PACKAGE

DESCRIPTION:

Film Microelectronics has developed this Current Amplifier for use as a buffer.

Small size and high reliability make these devices suitable for use in industrial, aerospace, and military applications.

FEATURES:

- 400 mA Output Current
- High Input Impedance - 400 k Ω Typical
- Wide Power Bandwidth - DC To 30 MHz
- High Slew Rate - 200V/ μ s Typical
- Low Harmonic Distortion
- Available As DCSS SMD 7801301XA
- Additional Screening Available

ABSOLUTE MAXIMUM RATINGS @ $T_C = 25^\circ\text{C}$, unless otherwise stated

Parameter	Rating	Units
V_S Supply Voltage	± 22	V
V_{CM} Input Voltage	± 22	V
P_D Power Dissipation	600	mW
θ_{JC} Thermal Resistance Junction to Case	40	$^\circ\text{C}/\text{W}$
T_J Operating Junction Temperature	-55 to +175	$^\circ\text{C}$
T_{STG} Storage Temperature	-65 to +150	$^\circ\text{C}$
Lead Temperature (10 sec)	300	$^\circ\text{C}$



RECOMMENDED OPERATING CONDITIONS

Parameter	Range	Units
T_A Ambient Operating Temperature Range	-55 to +125	$^\circ\text{C}$

e-mail: www.fmisales@satc.com
Website: www.filmmicroelectronics.com



FILM MICROELECTRONICS INCORPORATED
A SatCon Company



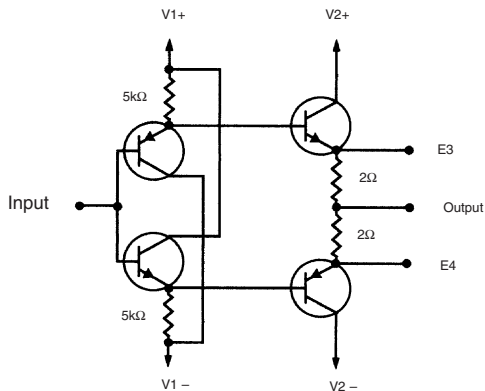
High Current, Linear Operational Amplifier
In A Hermetic 8-Lead Package



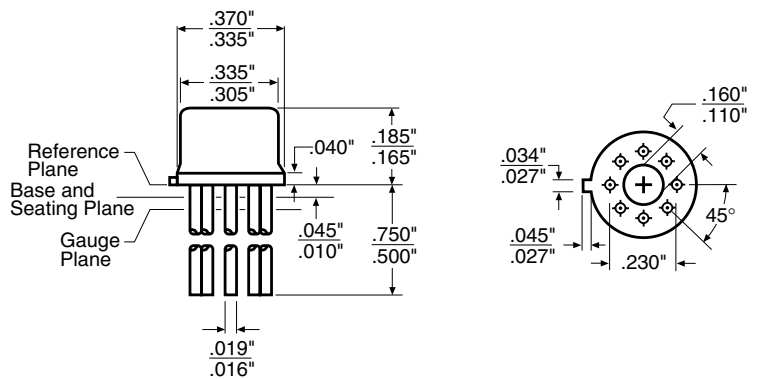
Electrical Characteristics @ $T_A = 25^\circ\text{C}$, $V_S = \pm 12\text{Vdc}$, unless otherwise stated

Parameter	Min.	Max.	Units	Test Conditions
V_{OS} Output Offset Voltage	-30	+30	mV	$R_S = 300\Omega$, $R_L = 1k\Omega$, $T_A = -55^\circ\text{C}$ to $+125^\circ\text{C}$
I_{IO} Input Offset Current	-10	+10	μA	$R_S = 10k\Omega$, $R_L = 1k\Omega$, $T_A = -55^\circ\text{C}$ to $+125^\circ\text{C}$
Z_{IN} Input Impedance	180	-	$k\Omega$	$V_{IN} = 1.0V_{RMS}$, $R_S = 200k\Omega$, $R_L = 1k\Omega$, $f = 1.0\text{kHz}$
A_V Voltage Gain	0.95	-	V/V	$V_{IN} = 3.0V_{PP}$, $R_S = 10k\Omega$, $R_L = 1k\Omega$, $f = 1.0\text{kHz}$, $T_A = -55^\circ\text{C}$ to $+125^\circ\text{C}$
V_O Output Voltage Swing	-10 -9.5	+10 +9.5	V	$V_{IN} = \pm 12\text{V}$, $R_L = 1k\Omega$ $V_{IN} = \pm 10\text{V}$, $R_L = 100\Omega$, $V_S = \pm 15\text{V}$
Z_{out} Output Impedance	-	10	Ω	$V_{IN} = 1V_{RMS}$, $R_S = 10k\Omega$, $R_L = 50\Omega$, $f = 1.0\text{kHz}$
I_{CC} Supply Current	-	± 10.0	mA	$R_S = 10k\Omega$, $R_L = 1k\Omega$
t_r Rise Time	-	12	ns	$\Delta V_{IN} = 100\text{mV}$, $R_L = 50\Omega$

SCHEMATIC



MECHANICAL OUTLINE



FILM MICROELECTRONICS INCORPORATED
A SatCon Company

0600