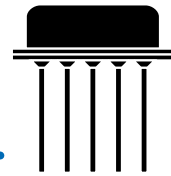




Fast Linear Buffer Amplifier
In A Hermetic 12-Lead Package



FAST LINEAR BUFFER AMPLIFIER IN A HERMETIC 12-LEAD PACKAGE

DESCRIPTION:

Film Microelectronics has developed this Fast Buffer Amplifier for use in applications such as line drivers, and for use with analog to digital converters and comparators. Small size and high reliability make these devices suitable for use in industrial, aerospace, and military applications.

FEATURES:

- High Gain
- Fast Rise Time
- High Input Impedance
- Wide Power Bandwidth - DC to 100MHz
- Available as DSCC SMD 8001401ZA
- Additional Screening Available

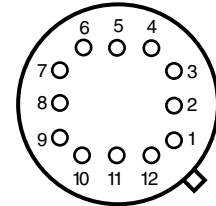
ABSOLUTE MAXIMUM RATINGS @ $T_C = 25^\circ C$, unless otherwise stated

Parameter	Rating	Units
V_S Supply Voltage	± 40	V
V_{CM} Input Voltage	± 40	V
P_D Power Dissipation (derate @ 10 mW per °C)	1.5	W
T_J Operating Junction Temperature	-55 to +175	°C
T_{STG} Storage Temperature	-65 to +150	°C
Lead Temperature (10 sec)	300	°C

RECOMMENDED OPERATING CONDITIONS

Parameter	Range	Units
T_A Ambient Operating Temperature Range	-55 to +125	°C

PIN CONNECTION Top View



Pin Connection

- Pin 1: V_{C+}
- Pin 2: NC
- Pin 3: NC
- Pin 4: NC
- Pin 5: Input
- Pin 6: Offset Preset
- Pin 7: Offset Adjust
- Pin 8: NC
- Pin 9: V_{C-}
- Pin 10: V-
- Pin 11: Output
- Pin 12: V+



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



FILM MICROELECTRONICS INCORPORATED
A SatCon Company



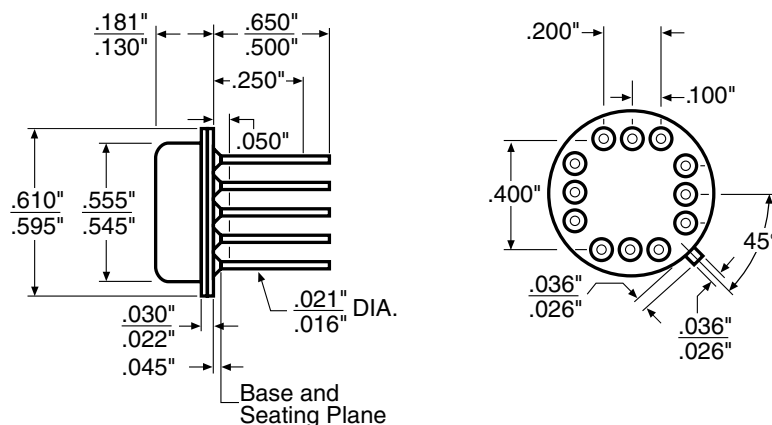
Fast Linear Buffer Amplifier
In A Hermetic 12-Lead Package



Electrical Characteristics @ $T_A = 25^\circ\text{C}$, $V_S = \pm 15\text{Vdc}$, unless otherwise stated

Parameter	Min.	Max.	Units	Test Conditions
V_{OO} Output Offset Voltage	-	± 10 ± 15	mV	$R_S = 100\text{k}\Omega$ $R_S = 100\text{k}\Omega$, $T_A = -55^\circ\text{C}$ to $+125^\circ\text{C}$
I_{IB} Input Bias Current	-	2.5 10	nA	$T_A = -55^\circ\text{C}$ to $+125^\circ\text{C}$
R_{IN} Input Impedance	-	10^{10}	Ω	
A_V Voltage Gain	0.97	1.0	V/V	$V_{IN} = 1V_{RMS}$, $R_S = 100\text{k}\Omega$, $R_L = 1\text{k}\Omega$, $T_A = -55^\circ\text{C}$ to $+125^\circ\text{C}$
V_O Output Voltage Swing	± 12 ± 9	-	V	$R_L = 1\text{k}\Omega$, $T_A = -55^\circ\text{C}$ to $+125^\circ\text{C}$ $R_L = 100\Omega$, $T_A = -55^\circ\text{C}$ to $+125^\circ\text{C}$
R_{OUT} Output Impedance	-	10	Ω	$V_{IN} = 1V_{RMS}$, $100\Omega \leq R_L \leq 1\text{k}\Omega$, $\pm 1\text{mA} \leq I_{OUT} \leq \pm 10\text{mA}$
I_{CC} Supply Current	-	22	mA	$V_{IN} = 0\text{V}$
+SR Positive Slew Rate	1000 500	-	V/ μs	$R_S = 50\Omega$, $R_L = 1\text{k}\Omega$, $V_{IN} = \pm 10\text{V}$ $R_S = 50\Omega$, $R_L = 1\text{k}\Omega$, $V_{IN} = \pm 10\text{V}$, $T_A = -55^\circ\text{C}$ to $+125^\circ\text{C}$
-SR Negative Slew Rate	500	-	V/ μs	$R_S = 50\Omega$, $R_L = 1\text{k}\Omega$, $V_{IN} = \pm 10\text{V}$, $T_A = -55^\circ\text{C}$ to $+125^\circ\text{C}$
P_D Power Consumption	-	660	mW	$V_{IN} = 0\text{V}$

MECHANICAL OUTLINE



FILM MICROELECTRONICS INCORPORATED
A SatCon Company