

Features

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



Description

Spectrum Microwave 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.

Absolute Maximum Ratings

@T_C = 25°C (Unless Otherwise Specified)

Symbol	Parameter	Value	Units
V _S	Supply Voltage	±40	V
V _{CM}	Input Voltage	±40	V
P _D	Power Dissipation (derate at 10 mW per °C)	1.5	W
θ _{JC}	Thermal Resistance, Junction to Case	40	°C/W
T _J	Operating Junction Temperature	-55 to +175	°C
T _{STG}	Storage Temperature	-65 to +150	°C
	Lead Temperature (10 sec)	300	°C

Spectrum Microwave

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Recommended Operating Conditions

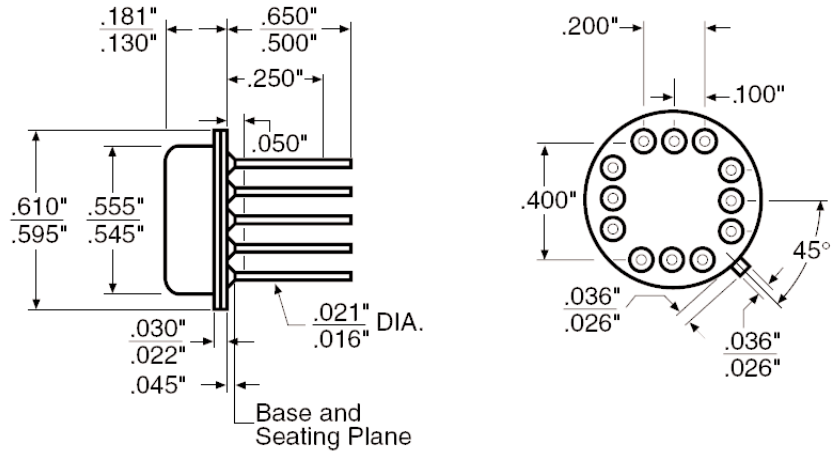
Symbol	Parameter	Value	Units
T_A	Ambient Operating Temperature Range	-55 to +125	°C

Electrical Characteristics

@ $T_A = 25^\circ\text{C}$, $V_S = \pm 15\text{Vdc}$
(Unless Otherwise Specified)

Symbol	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 $+125^\circ\text{C}$ $R_L = 100\text{k}\Omega$, $T_A = -55^\circ\text{C}$ 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



Pin Description

TOP VIEW

Pin No	Pin Name
1	V _{C+}
2	NC
3	NC
4	NC
5	Input
6	Offset Preset
7	Offset Adjust
8	NC
9	V _{C-}
10	V ₋
11	Output
12	V ₊

Contact Us



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