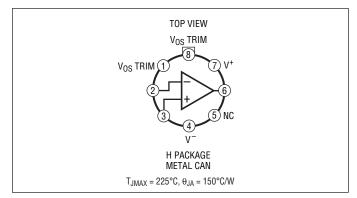


FEATURES

- 100% Tested at 200°C
- Absolute Maximum Operating Temperature 225°C
- Precision Specifications Over Extended Temperature Range
- Direct Replacement for OP-27 Series

Low Noise 200°C Op Amp

PIN CONFIGURATION



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ORDER INFORMATION

ORDER PART NUMBER	PART MARKING	PACKAGE DESCRIPTION	TEMPERATURE RANGE	
LT1007XH	LT1007XH	8-Lead TO-5 Metal Can	−55°C to 200°C	

These parts are only available in SnPb finish.

ELECTRICAL CHARACTERISTICS Supply Voltage = ±15V. (Note 1)

SYMBOL	PARAMETER	CONDITIONS	MIN/MAX 125°C	TYP 150°C	TYP 175°C	MIN/MAX 200°C	TYP 225°C	UNITS
V _{0S}	Input Offset Voltage	V _{CM} = 0	0.16	0.07	0.12	1.5	10	mV
I _{OS}	Input Offset Current	V _{CM} = 0	85	30	100	3000	5000	nA
I _B	Bias Current	V _{CM} = 0	95	50	750	12000	20000	nA
A _V	Voltage Gain	$V_{OUT} = \pm 10V$, $R_L = 2k$	2000	4000	2500	100	20	V/mV
CMRR	Common Mode Rejection	V _{CM} = ±10V	104	117	114	100	94	dB
PSRR	Power Supply Rejection	$V_S = \pm 10V \text{ to } \pm 15V$	100	117	114	86	55	dB
V _{OUT}	Output Voltage Swing	R _L = 2k	V _S - 3	V _S – 2	V _S – 2	V _S - 3	V _S - 3	V
Is	Supply Current	V _{OUT} = 0	5.7	2.8	2.8	6	2.5	mA
I _{SC} ⁻	Short-Circuit Low	V _{OUT} = 0 Min		20	17	5	9	mA
I _{SC} ⁺	Short-Circuit High	V _{OUT} = 0 Min		17	14.5	5	5	mA
SR	Slew Rate	$\Delta V = \pm 5V$		1.2	1.1	0.7	0.8	V/µS

Note 1: Devices are 100% tested at 200°C ±3°C to the limits shown. Since parameters change rapidly with temperature, devices are guaranteed at 190°C ±3°C and QA testing is done at 190°C ±3°C. For normal operating temperature range specifications please see the LT1007M data sheet.

Information furnished by Linear Technology Corporation is believed to be accurate and reliable. However, no responsibility is assumed for its use. Linear Technology Corporation makes no representation that the interconnection of its circuits as described herein will not infringe on existing patent rights.

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