LINEAR TECHNOLOGY

SPECIFICATION NOTICE

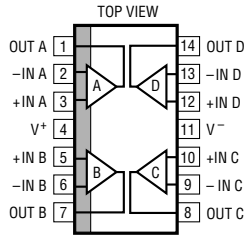
LT1366/67/68/69

October 1996

The specifications for the **LT®1366/LT1367/LT1368/LT1369** data sheet have been revised. The changes involve the Input Offset Current (I_{OS}), Input Offset Current Shift (ΔI_{OS}), Large-Signal Gain (A_{VOL}) and Output Voltage Swing HIGH (V_{OH}). In addition, the LT1367CS and LT1369CS, previously offered in a 16-lead SO package, are now offered in a 14-lead SO package and are a 100% functional drop-in replacement.

For complete specifications, typical performance curves and applications information, please see the LT1366/LT1367/LT1368/LT1369 data sheet.

PACKAGE/ORDER INFORMATION



S PACKAGE
14-LEAD PLASTIC SO

T_{JMAX} = 150°C, θ_{JA} = 150°C/W

ORDER PART NUMBER
LT1367CS
LT1369CS

ELECTRICAL CHARACTERISTICS

SYMBOL	PARAMETER	CONDITIONS		MIN	TYP	MAX	UNITS
T_A = 25°C, V_S = 5V, 0V, V_{CM} = 2.5V, V_O = 2.5V, unless otherwise noted							
I_{OS}	Input Offset Current	$V_{CM} = V_{CC}$ $V_{CM} = V_{EE}$			1 0.3	**12** **12**	nA nA
ΔI_{OS}	Input Offset Current Shift	$V_{CM} = V_{EE}$ to V_{CC}			1	**12**	nA
A_{VOL}	Large-Signal Voltage Gain	V_O = 50mV to 4.8V, R_L = 10k		**250**	2000		V/mV
V_{OH}	Output Voltage Swing HIGH	No Load		**V_{CC} – 0.012**	V_{CC} – 0.004		V
0°C < T_A < 70°C, V_S = 5V, 0V, V_{CM} = 2.5V, V_O = 2.5V, unless otherwise noted							
A_{VOL}	Large-Signal Voltage Gain	V_O = 50mV to 4.8V, R_L = 10k	●	**250**	2000		V/mV
V_{OH}	Output Voltage Swing HIGH	No Load	●	**V_{CC} – 0.014**	V_{CC} – 0.005		V
–40°C < T_A < 85°C (Note 3) V_S = 5V, 0V, V_{CM} = 2.5V, V_O = 2.5V, unless otherwise noted							
A_{VOL}	Large-Signal Voltage Gain	V_O = 50mV to 4.8V, R_L = 10k		**200**	2000		V/mV

For further information regarding this specification notice contact:

Linear Technology Corporation
1630 McCarthy Blvd.
Milpitas, California 95035-7417
Attn: Product Marketing Manager
Phone: (408) 432-1900

ELECTRICAL CHARACTERISTICS

SYMBOL	PARAMETER	CONDITIONS		MIN	TYP	MAX	UNITS
T_A = 25°C, V_S = 3V, 0V, V_{CM} = 1.5V, V_O = 1.5V, unless otherwise noted							
I_{OS}	Input Offset Current	$V_{CM} = V_{CC}$ $V_{CM} = V_{EE}$			1 0.3	**12** **12**	nA nA
ΔI_{OS}	Input Offset Current Shift	$V_{CM} = V_{EE}$ to V_{CC}			1	**12**	nA
A_{VOL}	Large-Signal Voltage Gain	V_O = 50mV to 2.8V, R_L = 10k		**250**	1500		V/mV
V_{OH}	Output Voltage Swing HIGH	No Load		**V_{CC} – 0.012**	V_{CC} – 0.004		V
0°C < T_A < 70°C, V_S = 3V, 0V, V_{CM} = 1.5V, V_O = 1.5V, unless otherwise noted							
A_{VOL}	Large-Signal Voltage Gain	V_O = 50mV to 2.8V, R_L = 10k	●	**150**	1500		V/mV
V_{OH}	Output Voltage Swing HIGH	No Load	●	**V_{CC} – 0.014**	V_{CC} – 0.005		V
–40°C < T_A < 85°C (Note 3) V_S = 3V, 0V, V_{CM} = 1.5V, V_O = 1.5V, unless otherwise noted							
A_{VOL}	Large-Signal Voltage Gain	V_O = 50mV to 2.8V, R_L = 10k	●	**125**	1000		V/mV
T_A = 25°C, V_S = ±15V, V_{CM} = 0V, V_O = 0V, unless otherwise noted							
I_{OS}	Input Offset Current	$V_{CM} = V_{CC}$ $V_{CM} = V_{EE}$			1 0.3	**12** **12**	nA nA
ΔI_{OS}	Input Offset Current Shift	$V_{CM} = V_{EE}$ to V_{CC}			1	**12**	nA
A_{VOL}	Large-Signal Voltage Gain	V_O = –14.7V to 14.7V, R_L = 10k V_O = –10V to 10V, R_L = 2k		**1000** **500**	10000 10000		V/mV V/mV
V_{OH}	Output Voltage Swing HIGH	No Load		**V_{CC} – 0.012**	V_{CC} – 0.004		V
0°C < T_A < 70°C, V_S = ±15V, V_{CM} = 0V, V_O = 0V, unless otherwise noted							
A_{VOL}	Large-Signal Voltage Gain	V_O = –14.7V to 14.7V, R_L = 10k V_O = –10V to 10V, R_L = 2k	● ●	**750** **500**	6000 6000		V/mV V/mV
V_{OH}	Output Voltage Swing HIGH	No Load	●	**V_{CC} – 0.014**	V_{CC} – 0.005		V
–40°C < T_A < 85°C (Note 3) V_S = ±15V, V_{CM} = 0V, V_O = 0V, unless otherwise noted							
A_{VOL}	Large-Signal Voltage Gain	V_O = –14.7V to 14.7V, R_L = 10k V_O = –10V to 10V, R_L = 2k	● ●	**500** **400**	6000 6000		V/mV V/mV

Note 3: The LT1366/LT1367/LT1368/LT1369 are designed, characterized and expected to meet these extended temperature limits, but are not tested at –40°C and 85°C. Guaranteed I grade parts are available, consult factory.