



LINEAR
INTEGRATED
CIRCUITS
- OPERATIONAL -
- AMPLIFIERS -

BM 108
BM 308
PRECISION OPERATIONAL AMPLIFIERS

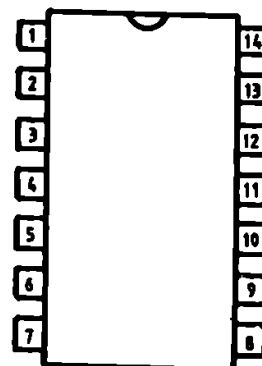
The BM 108 series are precision operational amplifiers having specifications about a factor of ten better than FET amplifiers over their operating temperature range. In addition to low input currents, selected units are available, having extremely low offset voltage (refer to BM 108A series) making possible to eliminate offset voltage adjustments in most cases.

Excellent performance is achieved by applying an advanced ion-implanted super-beta process and providing on chip zener-zapping offset voltage trimming capabilities. The devices operate with supply voltages from ± 2 to ± 20 V (± 2 to ± 18 V for BM 308) and have typ. 110 dB supply rejection to use unregulated supplies. Low supply current drain (typ. 300 μ A) makes the BM 108 attractive in battery operated/low power applications. Low offset current and low bias current provide excellent performance in high impedance circuits such as long period integrators, sample-and-holds and with piezoelectric and capacitive transducers.

Features

- Operating temperature	BM 108	-55 ...	+125 oC
	BM 308	0 ...	+70 oC
- Input bias current	BM 108	max.	2 nA
	BM 308	max.	5 nA
- Input bias current over temperature	BM 108 ..	max.	3 nA

- | 1. NC
- | 2. Compensation 1
- | 3. Guard
- | 4. Inverting input
- | 5. Non-inverting input
- | 6. Guard
- | 7. V-
- | 8. NC
- | 9. NC
- | 10. Output
- | 11. V+
- | 12. Compensation 2
- | 13. NC
- | 14. NC



PACKAGE TO-116 / TOP VIEW

LINEAR **INTEGRATED** **CIRCUITS** **- OPERATIONAL -** **- AMPLIFIERS -**



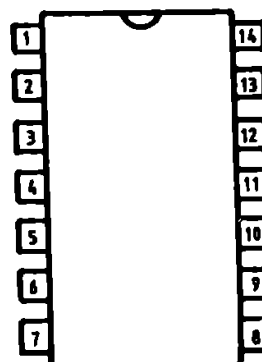
μM 108A **μM 308A** **PRECISION OPERATIONAL AMPLIFIERS**

The μM 108A series are precision operational amplifiers having specifications about a factor of ten better than FET amplifiers over their operating temperature range. In addition to low input currents, these circuits have extremely low offset voltage, making possible to eliminate offset adjustments in most cases. Excellent performance is achieved by applying an advanced ion-implanted super-beta process and providing on chip zener-zapping offset voltage trimming capabilities. The devices operate with supply voltages from ± 2 to ± 20 V (± 2 to ± 18 V for μM 308A) and have typ 110 dB supply rejection to use unregulated supplies. Low supply current drain (typ 300uA) makes the μM 108A attractive in battery operated/low power applications. Low offset current and low bias current provide excellent performance in high impedance circuits such as long period integrators, sample-and-holds and with piezoelectric and capacitive transducers.

Features

- Operating temperature	μM 108A ...	-55 ...	+125 °C
	μM 308A ...	0 ...	+70 °C
- Input offset voltage		max.	0.5 mV
- Input offset voltage drift		max.	5 uV/°C
- Input bias current over temperature μM 108A ..		max.	3 nA

- 1. NC
- 2. Compensation 1
- 3. Guard
- 4. Inverting input
- 5. Non-inverting input
- 6. Guard
- 7. V-
- 8. NC
- 9. NC
- 10. Output
- 11. V+
- 12. Compensation 2
- 13. NC
- 14. NC



PACKAGE TO-116 / TOP VIEW



LINEAR INTEGRATED CIRCUITS

- OPERATIONAL - - AMPLIFIERS -

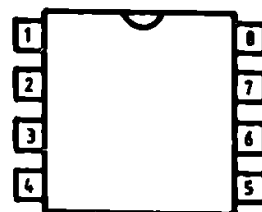
β M 108AN β M 308AN PRECISION OPERATIONAL AMPLIFIERS

The β M 108AN series are precision operational amplifiers having specifications about a factor of ten better than FET amplifiers over their operating temperature range. In addition to low input currents, these circuits have extremely low offset voltage, making possible to eliminate offset adjustments in most cases. Excellent performance is achieved by applying an advanced ion-implanted super-beta process and providing on chip zener-zapping offset voltage trimming capabilities. The devices operate with supply voltages from ± 2 to ± 20 V (± 2 to ± 18 V for β M 308AN) and have typ 110 dB supply rejection to use unregulated supplies. Low supply current drain (typ. 300 μ A) makes the β M 108AN attractive in battery operated/low power applications. Low offset current and low bias current provide excellent performance in high impedance circuits such as long period integrators, sample-and-holds and with piezoelectric and capacitive transducers.

Features

- Operating temperature	β M 108AN ...	-55 ... +125 $^{\circ}$ C
	β M 308AN ...	0 ... +70 $^{\circ}$ C
- Input offset voltage	max.	0.5 mV
- Input offset voltage drift	max.	5 μ V/ $^{\circ}$ C
- Input bias current over temperature β M 108AN .	max.	3 nA

1. Compensation 1
2. Inverting input
3. Non-inverting input
4. V-
5. NC
6. Output
7. V+
8. Compensation 2



PACKAGE MP-48 / TOP VIEW

LINEAR INTEGRATED CIRCUITS - OPERATIONAL - - AMPLIFIERS -



β M 108N β M 308N PRECISION OPERATIONAL AMPLIFIERS

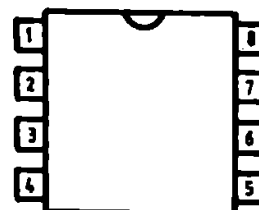
The β M 108N series are precision operational amplifiers having specifications about a factor of ten better than FET amplifiers over their operating temperature range. In addition to low input currents, selected units are available, having extremely low offset voltage (refer to β M 108AN series) making possible to eliminate offset voltage adjustment in most cases.

Excellent performance is achieved by applying an advanced ion-implanted super-beta process and providing on chip zener-zapping offset voltage trimming capabilities. The devices operate with supply voltages from ± 2 to ± 20 V (± 2 to ± 18 V for β M 308N) and have typ 110 dB supply rejection to use unregulated supplies. Low supply current drain (typ. 300uA) makes the β M 108AN attractive in battery operated/low power applications. Low offset current and low bias current provide excellent performance in high impedance circuits such as long period integrators, sample-and-holds and with piezoelectric and capacitive transducers.

Features

- Operating temperature	β M 108N ...	-55 ...	+125 oC
	β M 308N ...	0 ...	+70 oC
- Input bias current	β M 108N ...	max.	2 nA
	β M 308N ...	max.	5 nA
- Input bias current over temperature	β M 108N ..	max.	3 nA

1. Compensation 1
2. Inverting input
3. Non-inverting input
4. V-
5. NC
6. Output
7. V+
8. Compensation 2



PACKAGE MP-48 / TOP VIEW