

## LM3028 and LM3053 Differential RF/IF Amplifier

### GENERAL DESCRIPTION

The LM3028A/LM3053 is a monolithic RF/IF amplifier intended for emitter-coupled (differential) or cascode amplifier operation from DC to 120MHz in industrial and communications equipment. The LM3028A and LM3053 are plug-in replacements for the CA3028A and CA3053 respectively. The LM3053 is similar to the LM3928A but is recommended for IF amplifier operation with less critical DC parameters.

### FEATURES

Controlled for input offset voltage, input offset current, and input bias current\*

Balanced differential amplifier configuration with controlled constant-current source to provide unexcelled versatility.

Single- and dual-ended operation.

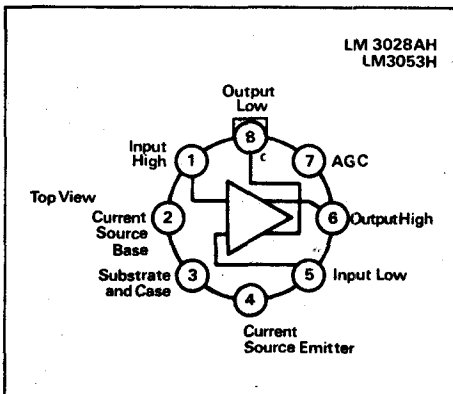
Operation from DC to 120MHz\*

Balanced AGC capability\*

Wide operating-current range.

\*Does not apply to the LM3053.

### CONNECTION DIAGRAMS



See outline drawing No. 97 for dimensions.

### REFERENCE TABLE

Code	Stock No.
LM3028AH	31150C
LM3053H	31054C

### LM3028A

#### ABSOLUTE MAXIMUM RATINGS

Supply operating voltage	$\pm 15V$
Differential input voltage	$\pm 5V$
Voltage between 1 & 8	0V to +20V
Voltage between 5 & 6	0V to +20V
Voltage between 2 & 3	+5V to -11V
Voltage between 2 & 4	+5V to -1V
Storage temperature	-65°C to 200°C
Operating temperature	-55°C to 125°C
Power dissipation at 25°C (Derate 5mW/°C above 85°C)	450mW
Lead temperature (soldering, 10 sec)	300°C

### LM3053

#### ABSOLUTE MAXIMUM RATINGS

Supply operating voltage	$\pm 12V$
Differential input voltage	$\pm 5V$
Voltage between 1 & 8	0V to +15V
Voltage between 5 & 6	0V to +15V
Voltage between 2 & 3	+5V to -11V
Voltage between 2 & 4	+5V to -1V
Storage temperature	-65°C to 200°C
Operating temperature	-55°C to 125°C
Power dissipation at 25°C (Derate 5mW/°C above 85°C)	450mW
Lead temperature (soldering, 10 sec)	300°C