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.

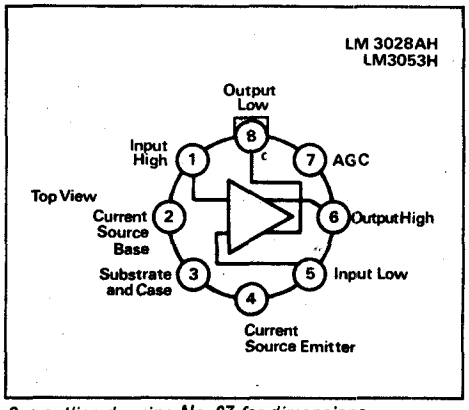
Operation from DC to 120MHz*

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	±15V
Differential input voltage	±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	±12V
Differential input voltage	±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