

## $\mu$ A747 Dual Frequency Compensated Operational Amplifier

### GENERAL DESCRIPTION

The  $\mu$ A747 is a pair of high performance monolithic operational amplifiers constructed using the Fairchild Planar epitaxial process. They are intended for a wide range of analog applications where board space or weight are important. High common mode voltage range and absence of 'latch-up' make the  $\mu$ A747 ideal for use as a voltage follower. The high gain and wide range of operating voltage provides superior performance in integrator, summing amplifier, and general feedback applications. The  $\mu$ A747 is short-circuit protected and requires no external components for frequency compensation. The internal 6dB/octave roll-off insures stability in closed loop applications. For single amplifier performance, see  $\mu$ A741 data sheet.

### FEATURES

- No frequency compensation required.
- Short-circuit protection.
- Offset voltage null capability.
- Large common-mode and differential voltage ranges.
- Low power consumption.
- No latch up.

### ABSOLUTE MAXIMUM RATINGS

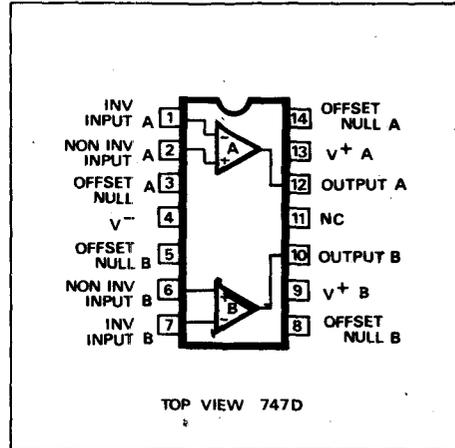
Supply voltage	
Military (747)	$\pm 22V$
Commercial (747C)	$\pm 18V$
Internal power dissipation	
Metal can	500mW
DIP	670mW
Differential input voltage	$\pm 30V$
Input voltage	$\pm 15V$
Voltage between offset null and $V^-$	$\pm 0.5V$
Storage temperature range	$-65^\circ C$ to $+150^\circ C$
Operating temperature range	
Military (747)	$-55^\circ C$ to $+125^\circ C$
Commercial (747C)	$0^\circ C$ to $70^\circ C$
Lead temperature (soldering, 60 seconds)	$300^\circ C$
Output short-circuit duration	Indefinite

### REFERENCE TABLE

Code	Stock No.	Code	Stock No.
747DC	<b>35835B</b>	747EHC*	<b>35838G</b>
747DM	<b>35836X</b>	747HC	<b>35839E</b>
747EDC*	<b>35837R</b>	747HM	<b>35840H</b>

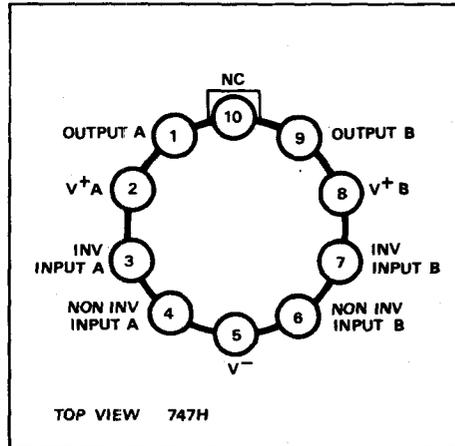
\*Data available on request.

### CONNECTION DIAGRAM



See outline drawing No. 133 for dimensions.

### CONNECTION DIAGRAM



See outline drawing No. 98 for dimensions.

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