

μ A723 Precision Positive Voltage Regulator

GENERAL DESCRIPTION

The μ A723 is a monolithic voltage regulator constructed using the Fairchild Planar epitaxial process. The device consists of a temperature compensated reference amplifier, error amplifier, power series pass transistor and current limit circuitry. Additional NPN or PNP pass elements may be used when output currents exceeding 150mA are required. Provisions are made for adjustable current limiting and remote shutdown. In addition to the above, the device features low standby current drain, low temperature drift and high ripple rejection. The μ A723 is intended for use with positive or negative supplies as a series, shunt, switching or floating regulator. Applications include laboratory power supplies, isolation regulators for low level data amplifiers, logic card regulators, small instrument power supplies, airborne systems and other power supplies for digital and linear circuits.

FEATURES

Positive or negative supply operation.
Series, shunt, switching or floating operation.
.01% line and load regulation.
Output voltage adjustable from 2 to 37 volts.
Output current to 150mA without external pass transistor.

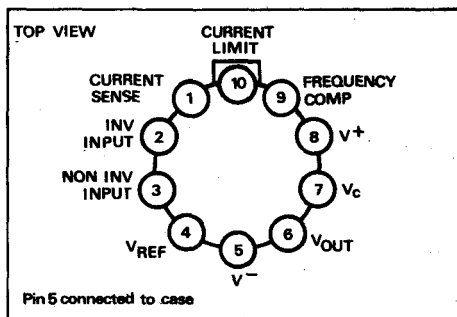
REFERENCE TABLE

Code	Stock No.	Code	Stock No.
723DC	35913F	723HM	35916X
723DM	35914D	723PC	35917R
723HC	35915B		

ABSOLUTE MAXIMUM RATINGS

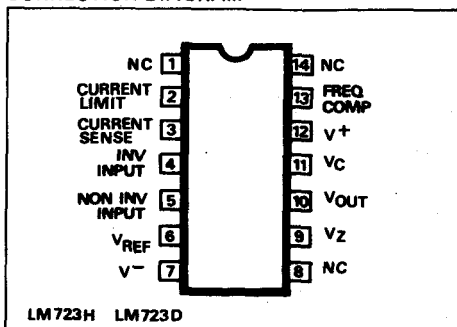
Pulse voltage from V^+ to V^- , (50ms) (723)	50V
Continuous voltage from V^+ to V^-	40V
Input/output voltage differential	40V
Differential input voltage	$\pm 5V$
Voltage between non-inverting input and V^-	+8V
Current from V_Z	25mA
Current from V_{REF}	15mA
Internal power dissipation	
Metal can	800mW
DIP	1000mW
Storage temperature range	$-65^\circ C$ to $+150^\circ C$
Operating temperature range	
Military (723)	$-55^\circ C$ to $+125^\circ C$
Commercial (723C)	$0^\circ C$ to $+70^\circ C$
Lead temperature (soldering, 60 seconds)	$300^\circ C$

CONNECTION DIAGRAM -



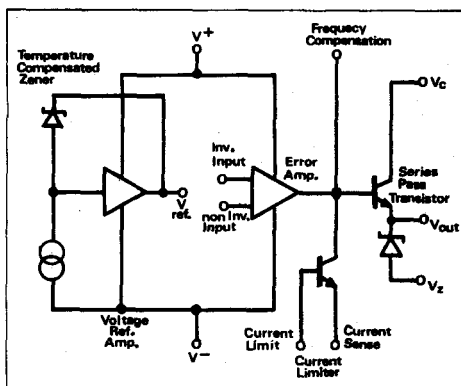
See outline drawing No. 98 for dimensions.

CONNECTION DIAGRAM



See outline drawings No. 130 and 131 for dimensions.

EQUIVALENT CIRCUIT



PLEASE QUOTE STOCK NO. AND MANUFACTURER'S CODE WHEN ORDERING