

Product Description



LH42094 circuit is a precision voltage stabilized positive power supply especially designed for operations under high temperature and wide temperature environment, this power supply has the characteristics that output doesn't change as the input voltage, load current and environment temperature, without connection with the external filter capacitance, the output noise is less than 1mV, and can operate reliably for long term period under shell temperature of 200°C . It is

suitable for all kinds of positive stabilized power supply, especially for electronic equipment under high temperature and wide temperature operation environment and voltage regulation factor and load regulation are smaller compared with foreign products of the same model.

Features:

Output Current : 1.5A

Input Voltage : +40V

Operating Temperature (case) : +200°C

Storage Temperature : -65°C~+200°C

Power Dissipation : 25W

Applications:

Logging while drilling

Measuring while drilling

Down-hole applications

Other industrial devices

Optional Model:

Model No.	Output Voltage(V)	Max output current (A)	Typical inflection (A)
LH42094-1.8	1.8	1.5	2
LH42094-2.5	2.5	1.5	2
LH42094-3.3	3.3	1.5	2
LH42094-5	5	1.5	2
LH42094-9	9	1.5	2
LH42094-12	12	1.5	2
LH42094-15	15	1.5	2
LH42094-24	24	1.5	2

Technical Data:

Parameter	Test condition	Test temp	Typical value
Output voltage	$I_{out}=300mA, V_{in}=V_{out}+4V_{DC}-4V_{DC}$	+25°C	$V_{out} \pm 1\%$
Temp coefficient output voltage	$I_{out}=300mA, V_{in}=V_{out}+4V_{DC}$	+25°C~+200°C	$\pm 50ppm(V_{out} \geq 3.3V)$ $\pm 120ppm(V_{out} < 3.3V)$
Voltage stability	$V_{in}=V_{out}+4V_{DC}-40V_{DC}$ $I_{out}=50mA$	+25°C~+200°C	$V_{out} \pm 0.5\%(V_{out} \geq 3.3V)$ $V_{out} \pm 2\%(V_{out} < 3.3V)$
Current load adjustment rate	$V_{in}=V_{out}+5V_{DC}$ $I_{out}=50mA-300mA$	+25°C~+200°C	$V_{out} \pm 0.5\%(V_{out} \geq 3.3V)$ $V_{out} \pm 1\%(V_{out} < 3.3V)$
Ripple attenuation(120Hz)	$V_{in}=V_{out}+5V_{DC}$	+25°C	-60dB
Quiescent current	$V_{in}=V_{out}+5V_{DC}, I_{out}=0$	+25°C	30mA
Short-circuit current	$V_{in}=V_{out}+5V_{DC}$	+25°C	400mA
Short-circuit current	$V_{in}=V_{out}+5V_{DC}$	+200°C	200mA
Transition current	$V_{in}=V_{out}+5V_{DC}$	+25°C	2A
Transition current	$V_{in}=V_{out}+5V_{DC}$	+200°C	2A
Output noise	$V_{in}=V_{out}+5V_{DC}, I_{out}=300mA$	+25°C	1mVRMS
Min different voltage ($\Delta V = V_{IN} - V_{OUT}$)	$I_{out}=300mA$	+25°C~+200°C	4VDC

Packaging Size:

