

7908 • THREE-TERMINAL NEGATIVE VOLTAGE REGULATOR IC

FEATURES:

- OUTPUT CURRENT IN EXCESS OF 1A;
- NO EXTERNAL COMPONENTS REQUIRED;
- INTERNAL SHORT CIRCUIT CURRENT LIMITING;
- INTERNAL THERMAL OVERLOAD PROTECTION;
- OUTPUT TRANSISTOR SAFE-AREA COMPENSATION;
- OUTPUT VOLTAGE OFFERED IN 4% TOLERANCE.

ABSOLUTE MAXIMUM RATINGS (Ta= 25° C)

Characteristic	Symbol	Norm	Unit
Input Voltage	Vin	V	-35
Maximum Dissipated Power(with heat sink)	Ptot(max)	W	15
Maximum Dissipated Power(without heat sink)	Ptot(max)	W	1.5
Thermal Resistance Junction to Case	OjC	°C/W	5.0
Thermal Resistance, Junction to Air	OjA	°C/W	65
Junction Temperature	Tj	°C	150

Tc=-45÷+70°C

ELECTRICAL CHARACTERISTICS

(Vin=-14V,Io=0.5A,Ci=2.2mkF,Co=1.0mkF,Tj=0+125°C, unless otherwise noted.)

Characteristic	Symbol	Norm			Unit
		Min	TYP	Max	
Output Voltage(Tj=25°C)	Vo	-7.7		-8.3	V
Output Voltage (5.0mA≤Io≤1.0A,Po≤15W) -10,5V≥Vin≥-23V	Vo	-7.6		-8.4	V
Line Regulation(Tj=+25°C, Io=0,1A) -10,5 V≥Vin≥-25 V -11V≥Vin≥-17 V (Tj=+25°C, Io=0,5A) -10,5 V≥Vin≥-25 V -11V≥Vin≥-17 V	ΔVv			80 40 160 80	mV
Load Regulation(Tj=+25°C) 5.0mA≤Io≤1.5A 0.25A≤Io≤0.75A	ΔVi			160 80	mV
Quiescent Current(Tj=+25°C)	Ib			8.0	mA
Quiescent Current Change -10.5 V≥Vin≥-25 V 5.0mA≤Io≤1.5 A	ΔIb			1.0 0.5	mA
Dropout Voltage (Io=1.0A,Tj=+25°C)	Vi-Vo		2.0		V
Average Temperature Coefficient of Output Voltage	TCVo		0,5		mV/°C

