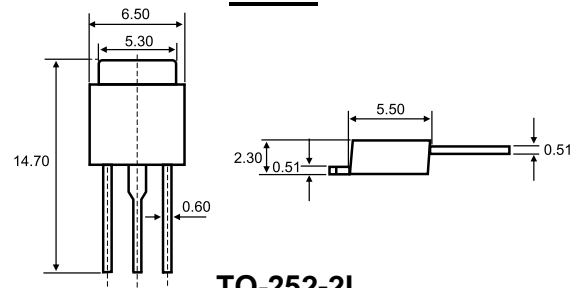


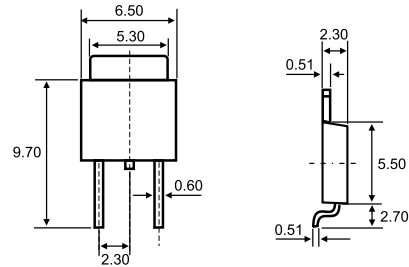
78M08

Three-terminal Positive Voltage Regulator

TO-251



TO-252-2L



Dimensions in inches and (millimeters)

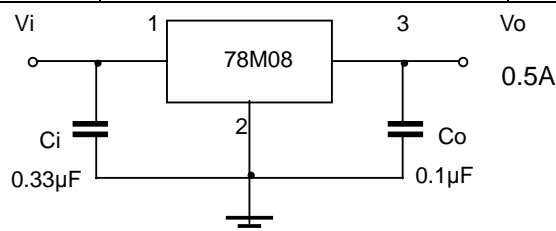
ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

Parameter	Symbol	Value	Unit
Input Voltage	V_I	35	V
Operating Junction Temperature Range	T_{OPR}	0-+125	°C
Storage Temperature Range	T_{STG}	-65-+150	°C

ELECTRICAL CHARACTERISTICS ($V_i=14V, I_o=350mA, C_i=0.33\mu F, C_o=0.1\mu F$, unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Output voltage	V_o	25°C	7.7	8	8.3	V
		10.5V ≤ V_i ≤ 23V, $I_o=5mA-350mA$ $P_o \leq 15W$	7.6	8	8.4	V
Load Regulation	ΔV_o	$I_o=5mA-500mA$	25°C	20	160	mV
		$I_o=5mA-200mA$	25°C	10	80	mV
Line regulation	ΔV_o	10.5V ≤ V_i ≤ 25V, $I_o=200mA$	25°C	6	100	mV
		11V ≤ V_i ≤ 25V, $I_o=200mA$	25°C	2	50	mV
Quiescent Current	I_q	25°C	4.6	6		mA
Quiescent Current Change	ΔI_q	10.5V ≤ V_i ≤ 25V, $I_o=200mA$	0-125°C		0.8	mA
	ΔI_q	5mA ≤ I_o ≤ 350mA	0-125°C		0.5	mA
Output Noise Voltage	V_N	10Hz ≤ f ≤ 100KHz	25°C	52		uV
Ripple Rejection	RR	11.5V ≤ V_i ≤ 21.5V, $f=120Hz, I_o=300mA$	0-125°C	56	80	dB
Dropout Voltage	V_d	$I_o=350mA$	25°C	2		V
Short Circuit Current	I_{sc}	$V_i=14V$	25°C	250		mA
Peak Current	I_{pk}	25°C	0.7			A

TYPICAL APPLICATION



78M08

Three-terminal Positive Voltage Regulator

Typical Characteristics

