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78M08 Three-terminal positive voltage regulator

TO-251/TO-252-2L Plastic-Encapsulate Regulators

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客户确认：

公司签章：

部门	工程部	品保部	采购部
签名			
日期			

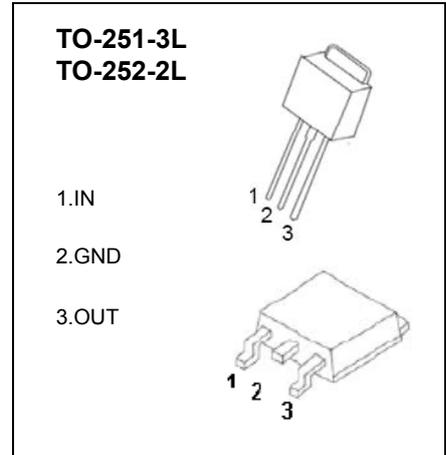


TO-251-3L/TO-252-2L Plastic-Encapsulate Regulators

78M08 Three-terminal positive voltage regulator

FEATURES

- Maximum output current
I_{OM}: 0.5 A
- Output voltage
V_O: 8V
- Continuous total dissipation
P_D: 1.25 W (T_a = 25 °C)



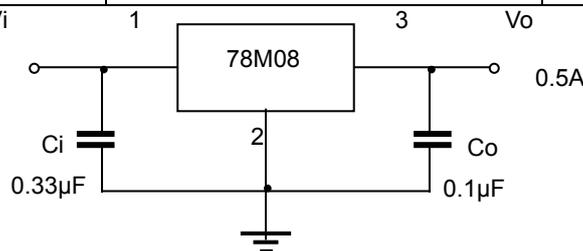
ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

Parameter	Symbol	Value	Unit
Input Voltage	V _I	15	V
Operating Junction Temperature Range	T _{OPR}	0-+125	°C
Storage Temperature Range	T _{STG}	-65-+150	°C

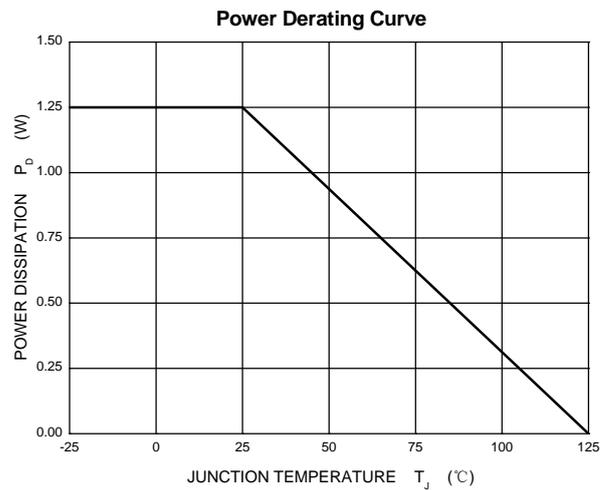
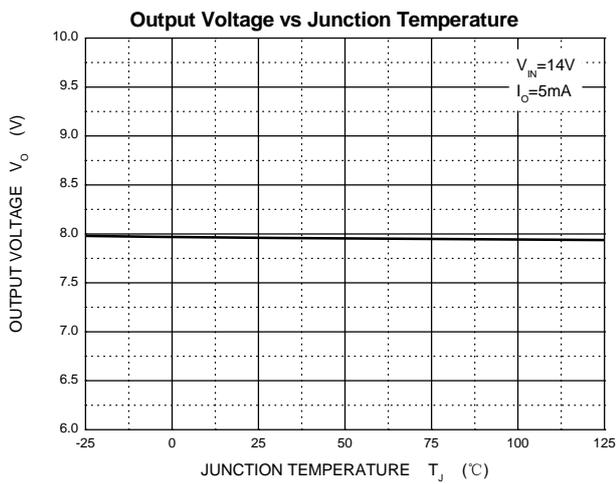
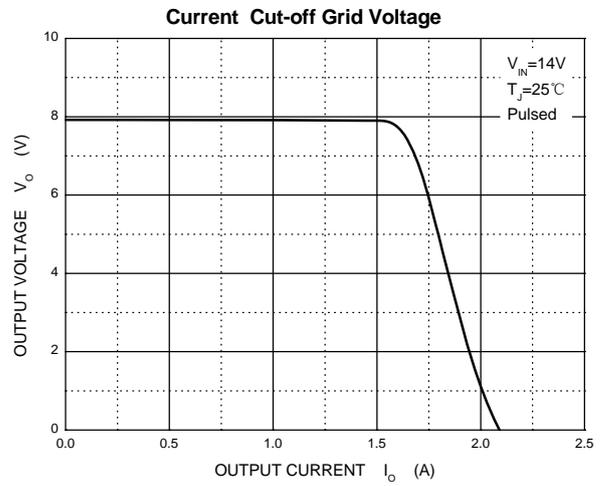
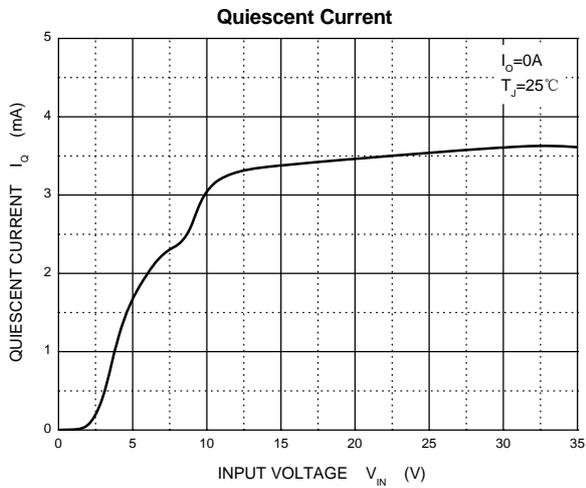
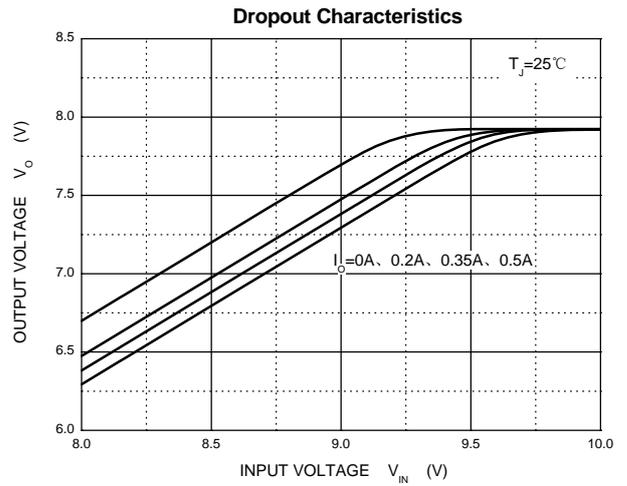
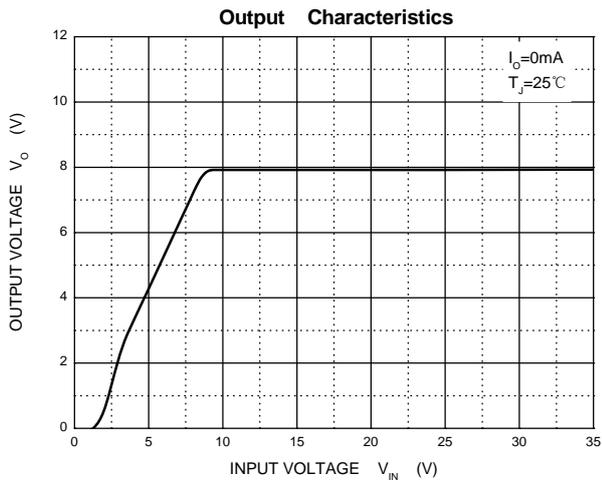
ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE (V_i=14V, I_o=350mA, C_i=0.33μF, C_o=0.1μF, unless otherwise specified)

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 ≤ 15W	0-125°C	7.6	8	8.4
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
		5mA ≤ I _o ≤ 350mA	0-125°C		0.5	mA
Output Noise Voltage	V _N	10Hz ≤ f ≤ 100KHz	25°C	52		μV
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		0.5		A

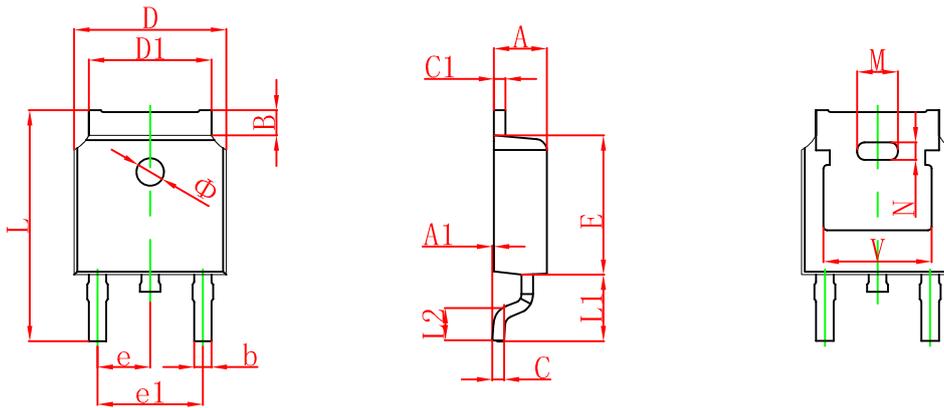
TYPICAL APPLICATION



Typical Characteristics

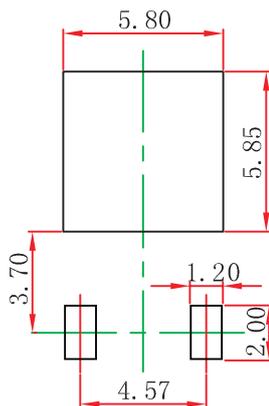


TO-252(4R)-2L Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	2.200	2.380	0.087	0.094
A1	0.000	0.100	0.000	0.004
B	0.800	1.400	0.031	0.055
b	0.710	0.810	0.028	0.032
c	0.460	0.560	0.018	0.022
c1	0.460	0.560	0.018	0.022
D	6.500	6.700	0.256	0.264
D1	5.130	5.460	0.202	0.215
E	6.000	6.200	0.236	0.244
e	2.286 TYP.		0.090 TYP.	
e1	4.327	4.727	0.170	0.186
M	1.778REF.		0.070REF.	
N	0.762REF.		0.018REF.	
L	9.800	10.400	0.386	0.409
L1	2.9REF.		0.114REF.	
L2	1.400	1.700	0.055	0.067
V	4.830 REF.		0.190 REF.	
Φ	1.100	1.300	0.043	0.051

TO-252(4R)-2L Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.05 mm.
3. The pad layout is for reference purposes only.