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78M06 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

78M06 Three-terminal positive voltage regulator

FEATURES

Maximum output current

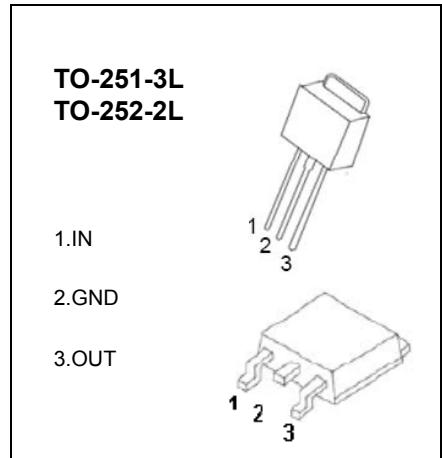
I_{OM} : 0.5 A

Output voltage

V_O : 6V

Continuous total dissipation

P_D : 1.25 W



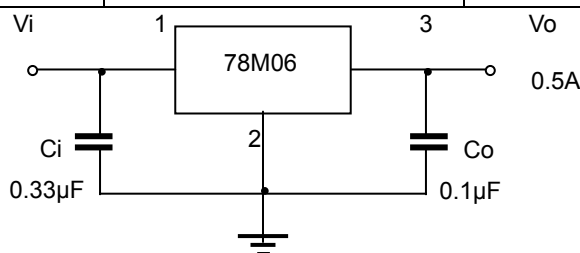
ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

Parameter	Symbol	Value	Unit
Input Voltage	V_i	±5	V
Operating Junction Temperature Range	T_{OPR}	0-+125	°C
Storage Temperature Range	T_{STG}	-65-+150	°C

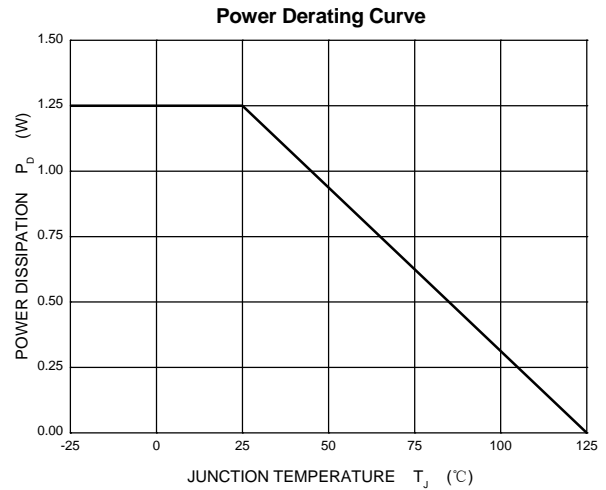
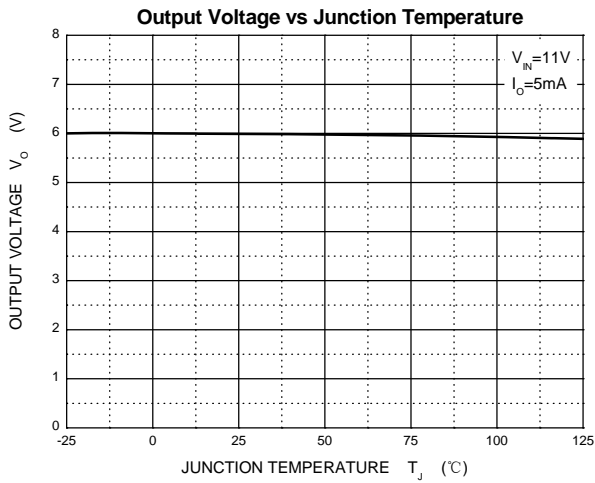
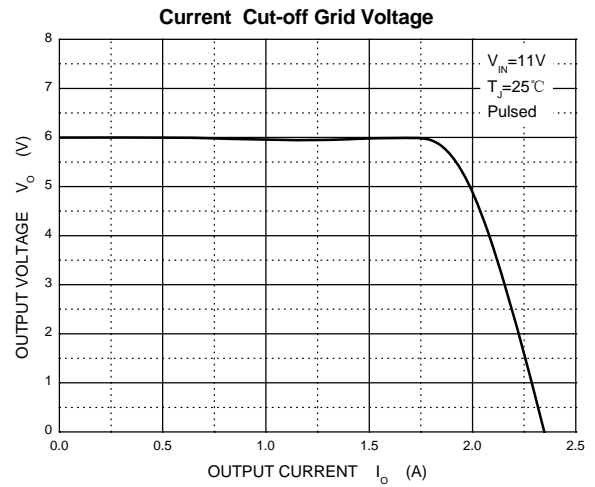
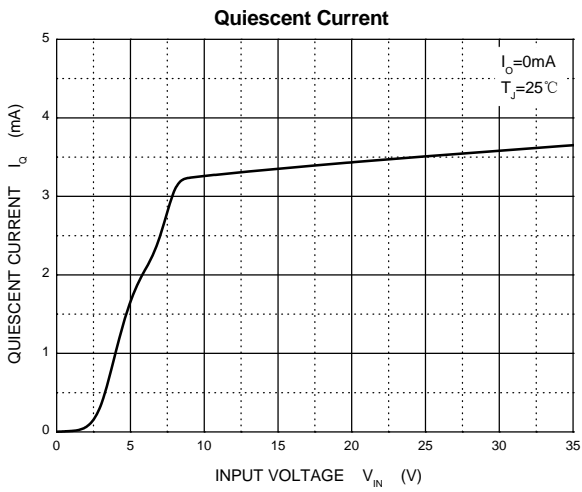
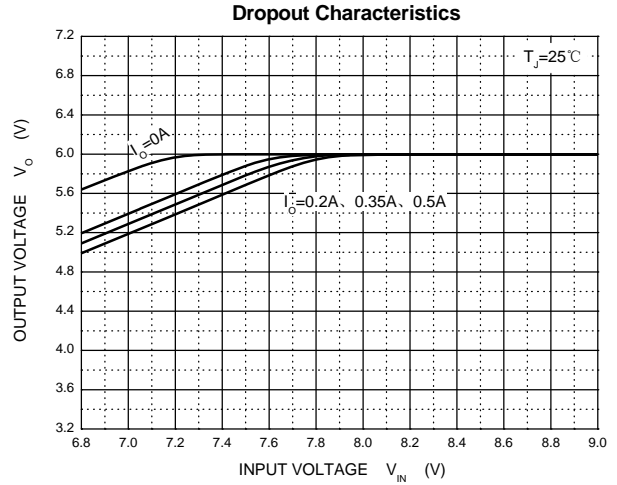
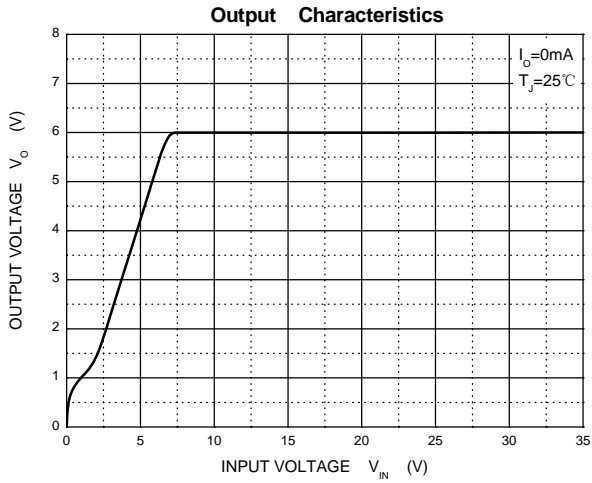
ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE ($V_i=11V$, $I_O=350mA$, $C_i=0.33\mu F$, $C_o=0.1\mu F$, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit	
Output Voltage	V_o		25°C	5.75	6	6.25	V
		$8V \leq V_i \leq 21V$, $I_o=5mA-350mA$ $P_o \leq 15W$	0-125°C	5.7	6	6.3	V
Load Regulation	ΔV_o	$I_o=5mA-0.5A$	25°C		18	120	mV
		$I_o=5mA-200mA$	25°C		10	60	mV
Line Regulation	ΔV_o	$8V \leq V_i \leq 25V$, $I_o=200mA$	25°C		5	100	mV
		$9V \leq V_i \leq 25V$, $I_o=200mA$	25°C		1.5	50	mV
Quiescent Current	I_q		25°C	4.3	6	mA	
Quiescent Current Change	ΔI_q	$9V \leq V_i \leq 25V$, $I_o=200mA$	0-125°C			0.8	mA
		$5mA \leq I_o \leq 350mA$	0-125°C			0.5	mA
Output Noise Voltage	V_N	$10Hz \leq f \leq 100KHz$	25°C		45	uV	
Ripple Rejection	RR	$9V \leq V_i \leq 19V$, $f=120Hz$, $I_o=300mA$	0-125°C	59	80	dB	
Dropout Voltage	V_d	$I_o=350mA$	25°C		2	V	
Short Circuit Current	I_{sc}	$V_i=11V$	25°C		270	mA	
Peak Current	I_{pk}		25°C		0.5	A	

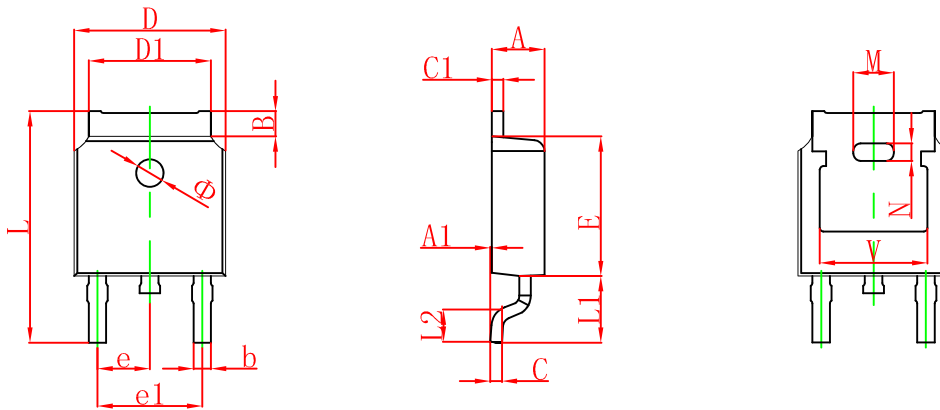
TYPICAL APPLICATION



Typical Characteristics

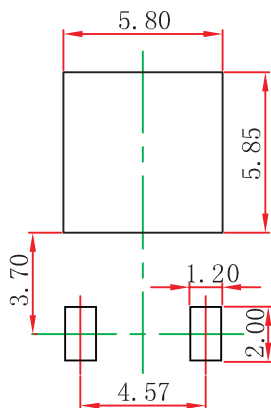


TO-252(4R)-2L Package Outline Dimensions



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.