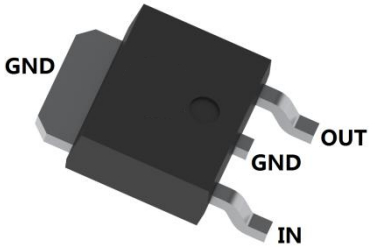
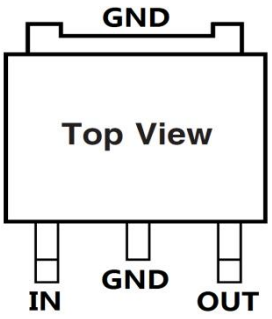
Three Terminal Positive Voltage Regulator



TO-252

■ Features

- Maximum Output current I_{OM}: 0.5 A
- Output voltage V_O: 15V
- Continuous total dissipation P_D: 1.25W



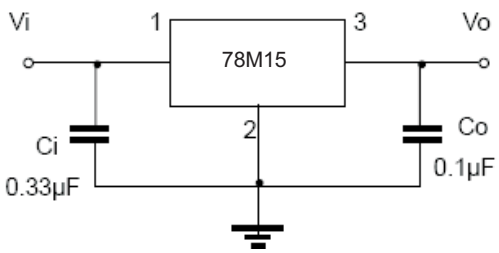
■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Input Voltage	V_i	35	V
Operating Junction Temperature Range	T_{OPR}	-55 to +125	℃
Storage Temperature Range	T_{STG}	-65 to +150	℃

■ Electrical Characteristics (V_{IN}=23V,I_o=350mA,0℃<Tj<125℃,C_i=0.33μF,C_o=0.1μF, unless otherwise specified)

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Output voltage	V_O	Tj=25℃	14.4	15	15.6	V
		17.5≤V_{IN}≤30V, Io=5mA-350mA,P_D≤15W	14.25	15	15.75	V
Load regulation	△V_O	Tj=25℃, Io=5mA-500mA			300	mV
		Tj=25℃, Io=5mA-200mA			150	mV
Line regulation	△V_O	17.5≤V_{IN}≤30V, Io=200mA			100	mV
		20≤V_{IN}≤30V, Io=200mA			50	mV
Quiescent current	Iq	Tj=25℃			6.0	mA
Quiescent current change	△Iq	17.5V≤V_I≤30V, Io=200mA			0.8	mA
	△Iq	5mA≤Io≤350mA			0.5	mA
Output noise voltage	V_N	10Hz≤f≤100KHz		90		uV
Ripple rejection	RR	15V≤V_I≤25V,f=120Hz, I_{OUT}=300mA	54			dB
Dropout Voltage	V_D	Tj=25℃,Io=350mA		2.0		V
Short Circuit Current	I_{SC}	V_I=35V, Tj=25℃		240		mA
Peak Output Current	I_{pk}	Tj=25℃		2.1		A

■ Typical Application



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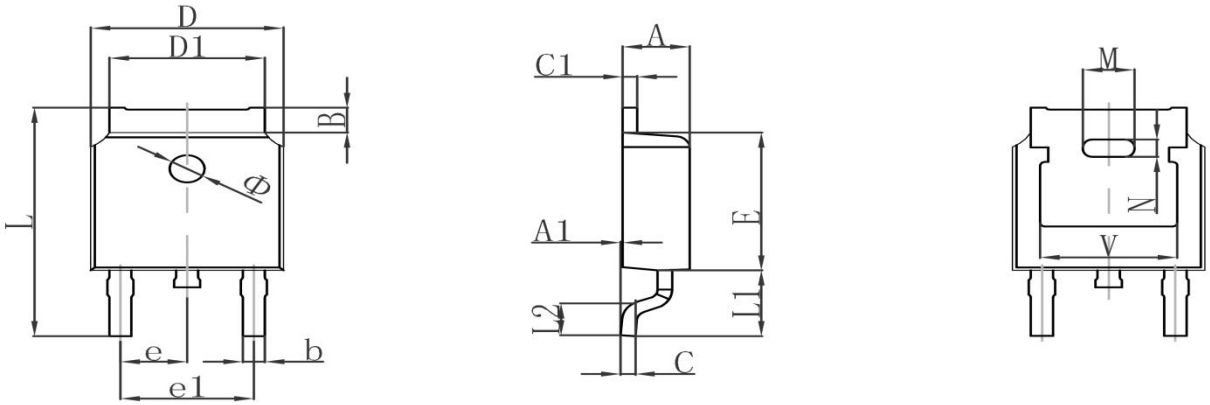
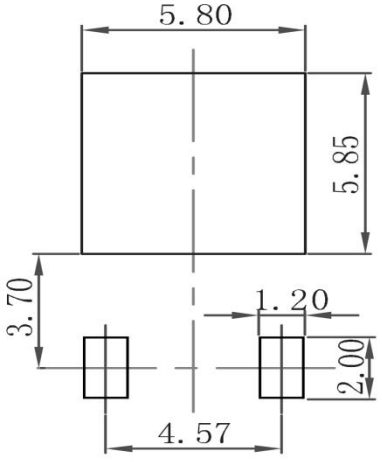
TO-252 Package Outline Dimensions



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	2.286TYP		0.090TYP	
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	4.830REF		0.190REF	
Φ	1.100	1.300	0.043	0.051

TO-252 Suggested Pad Layout



Note:

1.Controlling dimension: in millimeters

2.General tolerance: ±0.05mm

3.The pad layout is for reference purposes only