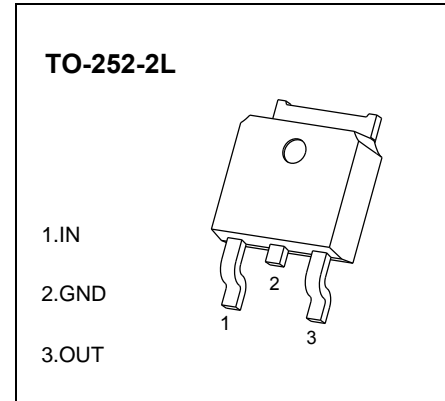


TO-252-2L Plastic-Encapsulate Voltage Regulators

CJ78M15 Three-terminal positive voltage regulator

FEATURES

- Maximum output current
I_{OM}: 0.5 A
- Output voltage
V_O: 15 V
- Continuous total dissipation
P_D: 1.25 W (T_a= 25 °C)



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

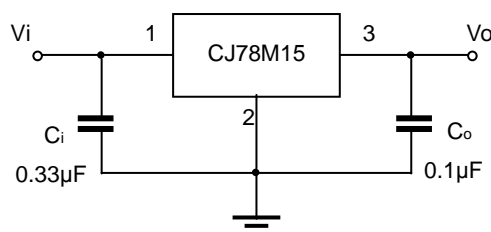
Parameter	Symbol	Value	Unit
Input Voltage	V _i	35	V
Thermal Resistance from Junction to Ambient	R _{θJA}	80	°C/W
Operating Junction Temperature Range	T _{OPR}	-25~+125	°C
Storage Temperature Range	T _{STG}	-65~+150	°C

ELECTRICAL CHARACTERISTICS (V_i=23V, 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	V _i =23V, I _o =350mA	25°C	14.4	15	15.6	V
		17.5V ≤ V _i ≤ 30V, I _o =5mA~350mA	-25-125°C	14.25	15	15.75	V
Load Regulation	ΔV _o	I _o =5mA~500mA	25°C			300	mV
		I _o =5mA~200mA	25°C			150	mV
Line Regulation	ΔV _o	17.5V ≤ V _i ≤ 30V, I _o =200mA	25°C			100	mV
		20V ≤ V _i ≤ 26V, I _o =200mA	25°C			50	mV
Quiescent Current	I _q	V _i =23V, I _o =350mA	25°C			6	mA
Quiescent Current Change	ΔI _q	17.5V ≤ V _i ≤ 30V, I _o =200mA	-25-125°C			0.8	mA
	ΔI _q	V _i =23V, I _o =5mA~350mA	-25-125°C			0.5	mA
Output Noise Voltage	V _N	10Hz ≤ f ≤ 100KHz	25°C		90	μV/V _o	
Ripple Rejection	RR	18.5V ≤ V _i ≤ 28.5V, f=120Hz, I _o =300mA	-25-125°C	54			dB
Dropout Voltage	V _d		25°C		2		V

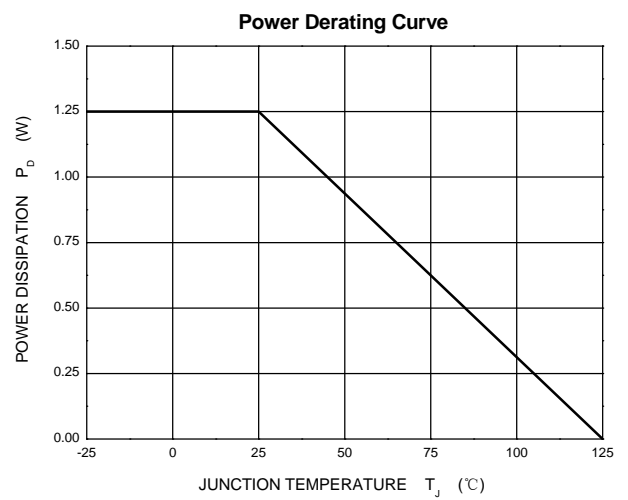
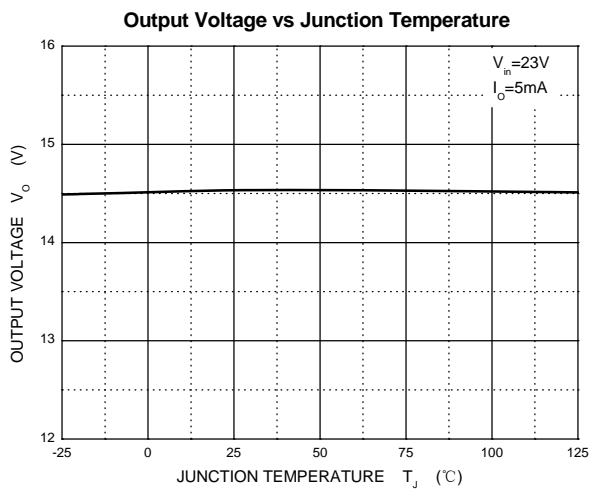
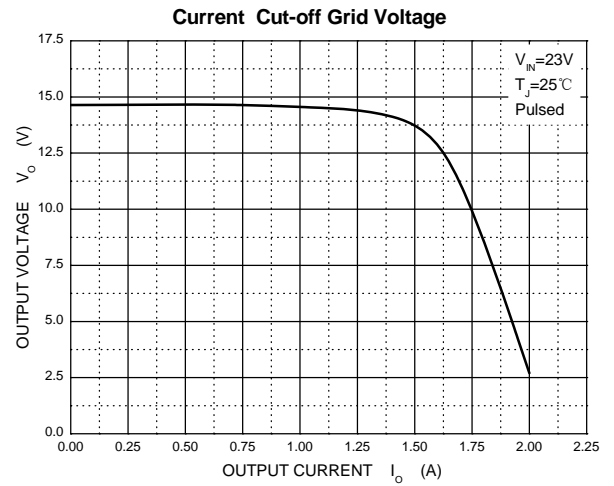
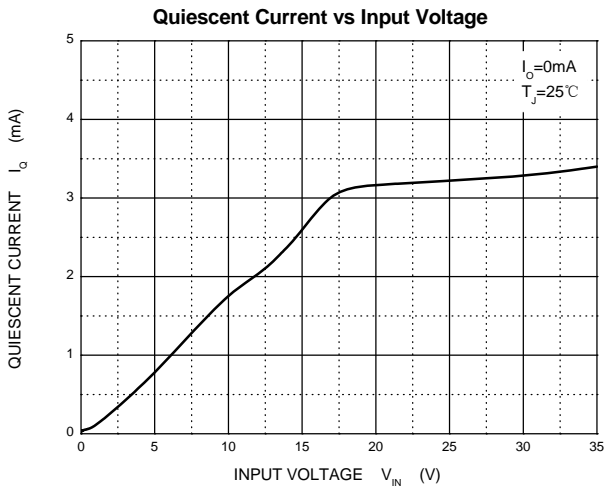
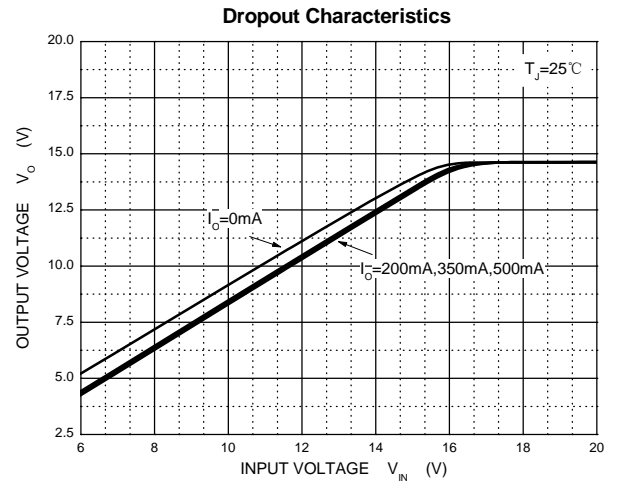
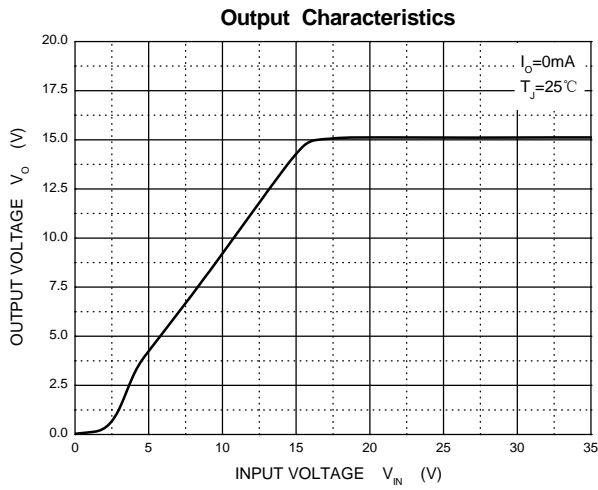
* Pulse test.

TYPICAL APPLICATION

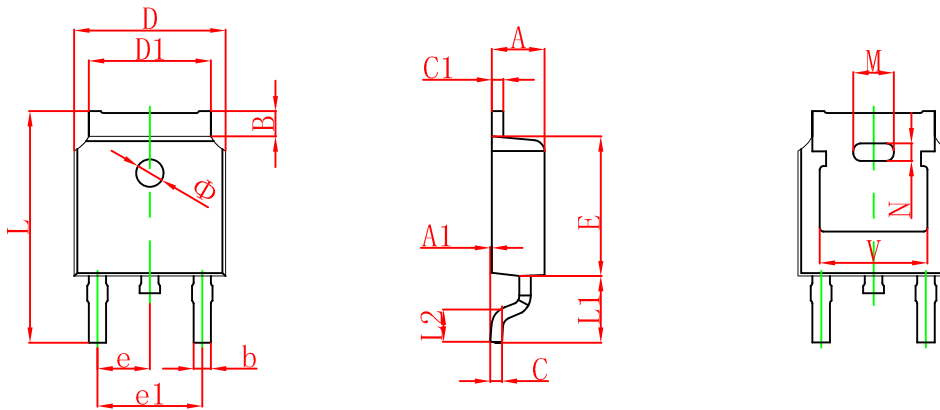


Note: Bypass capacitors are recommended for optimum stability and transient response and should be located as close as possible to the regulators.

Typical Characteristics

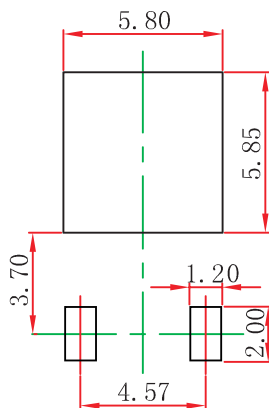


TO-252(4R)-2L Package Outline Dimensions



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:

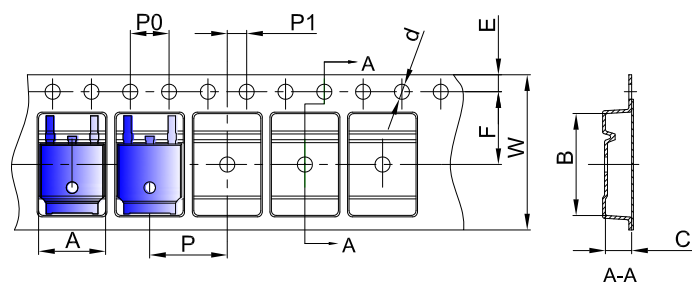
1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.

NOTICE

JCET reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. JCET does not assume any liability arising out of the application or use of any product described herein.

TO-252(4R)-2L Tape and Reel

TO-252 Embossed Carrier Tape



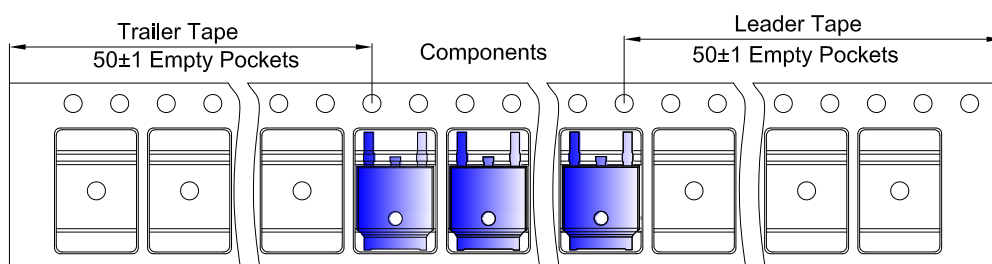
Packaging Description:

TO-252 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 25,00 units per 13" or 33.0 cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).

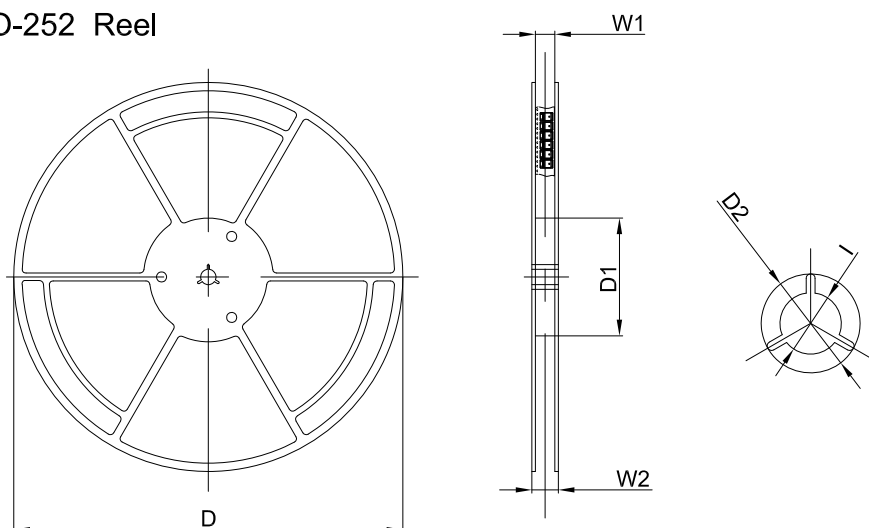
Dimensions are in millimeter

Pkg type	A	B	C	d	E	F	P0	P	P1	W
TO-252	6.90	10.50	2.70	Ø1.55	1.75	7.50	4.00	8.00	2.00	16.00

TO-252 Tape Leader and Trailer



TO-252 Reel



Dimensions are in millimeter

Reel Option	D	D1	D2	W1	W2	I
13"Dia	330.00	100.00	Ø21.00	16.40	21.00	Ø13.00

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
2,500 pcs	13inch	2,500 pcs	340×336×29	25,000 pcs	353×346×365	