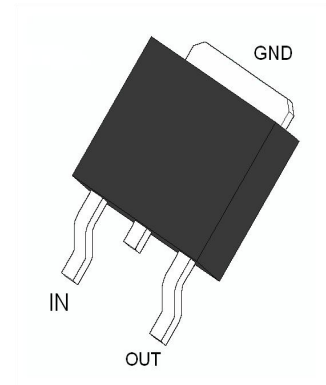




1.Features

- Output Current up to 0.5A
- Output Voltages of 15V
- Thermal Overload Protection
- Short Circuit Protection
- Output Transistor Safe Operating area (SOA)Protection

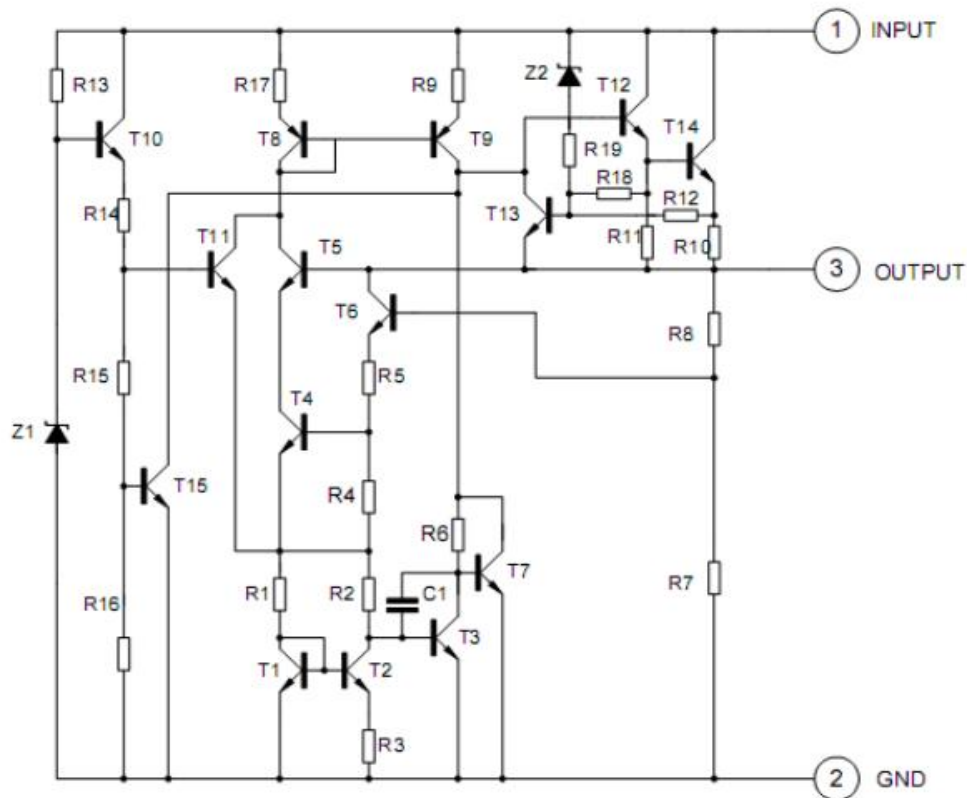
Case:TO-252



2.Mechanical Data

- Case:Molded Plastic,TO-252
- Epoxy:UL 94V-0 rate flame retardant
- Terminals:Plated Leads Solderable per MIL-STD-750,Method-2026.
- Marking: marked on body.
- Mounting Position : Any.

3.Internal Block Digram



**4.Maximum Ratings and Electrical Characteristics**

Rating at 25°C Ambient temperature unless otherwise specified

Parameters	Symbol	Value	Unit
Input Voltage	V_{IN}	35	V
Out put Voltage	V_O	15	V
Thermal Resistance Junction-Cases	$R\theta_{JC}$	5	°C/W
Thermal Resistance Junction-Airs	$R\theta_{JA}$	92	°C/W
Operating Temperature Range	T_{OPR}	0~+125	°C
Storage Temperature Range	T_{STG}	-55~+150	°C

5.Electrical Characteristics(V_I = 23V, I_O = 350mA, C_I = 0.33μF, C_O = 0.1μF, T_J = 0 to 125°C, unless otherwise specified)

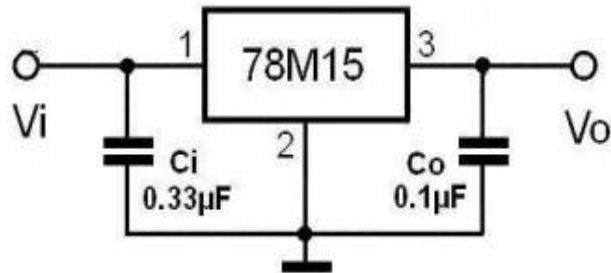
Parameters	Symbol	Cindition	Min	TYP	Max	Unit
Output Voltage	V_O	T _J = 25°C	14.4	15	15.6	V
		V _I = 17.5V~30V I _O = 5~350mA	14.25	15	15.75	V
Line Regulation @T _J = 25°C	ΔV_O	I _O = 0.2A, V _I = 17.7~25V	-	-	120	mV
		I _O = 0.2A, V _I = ~25V	-	-	60	mV
Load Regulation	ΔV_O	I _O = 5~500mA, T _J = 25°C	-	-	300	mV
		I _O = 5~200mA, T _J = 25°C	-	-	150	mV
Quiescent Current	I _Q	T _J = 25°C	-	-	6	mV
Quiescent Current Change	ΔI_Q	I _O = 5~350mA	-	-	0.5	mV
		V _I = 17.5~30V	-	-	0.8	mV
Output Voltage Drift	$\Delta V / \Delta T$	I _O = 5mA	-	-1	-	mV/°C
Output Noise Voltage	V _N	10Hz ≤ f ≤ 100KHz	-	100	-	μV
Ripple Rejection	RR	f = 120Hz, I _O = 300mA V _I = 18.5 to 28.5V	55	71	-	dB
Short Circuit Current	I _{SC}	T _J = +25 °C, V _I = 35V	-	300	-	mA
Peak Current	I _{PK}		-	700	-	mA
Dropout Voltage	V _d	T _J = 25°C, I _O = 0.5A	-	2	-	V

Notes:

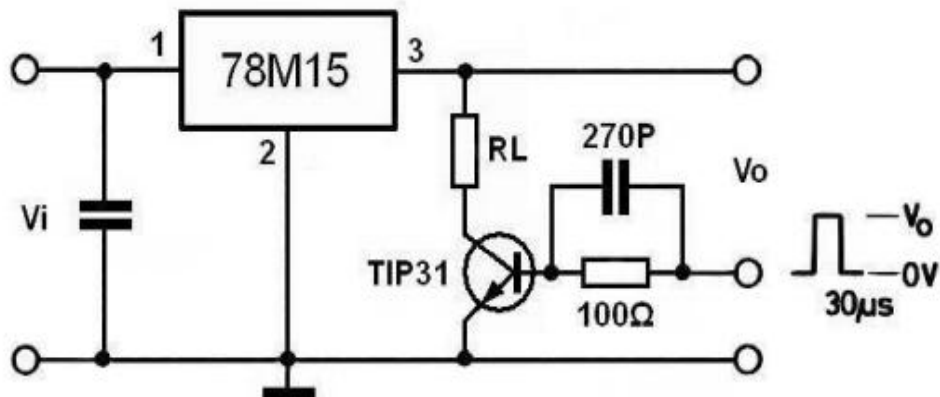
*Load and line regulation are specified at constant junction temperature. Change in V_O due to heating effects must be taken into account separately. Pulse testing with low duty is used.



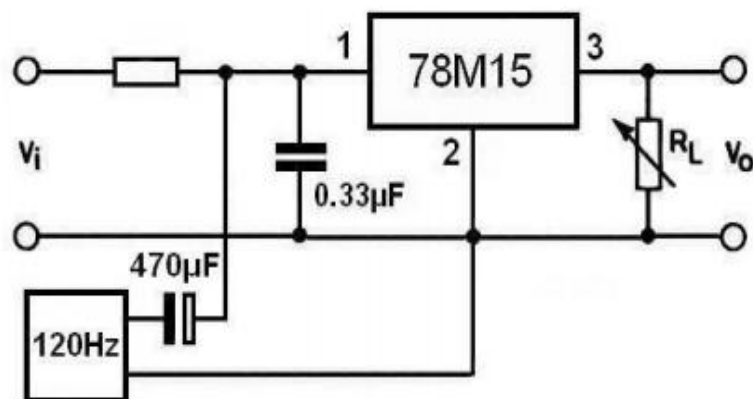
6. Rating And Characteristic Curves



DC Parameter



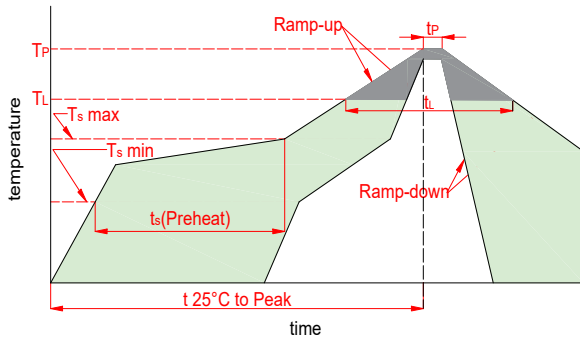
Load Regulation



Ripple Rejection

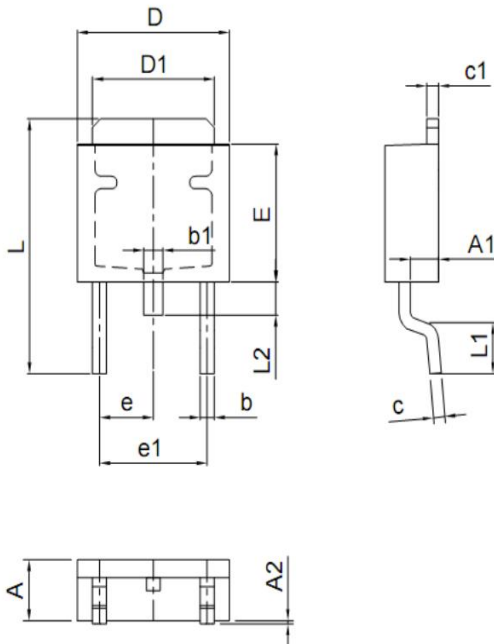


7. Soldering Parameters



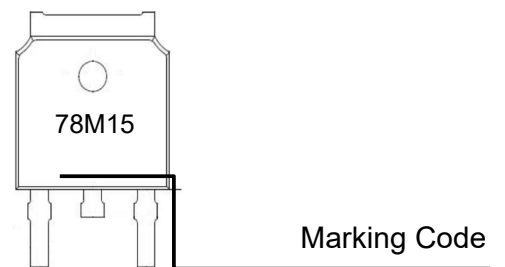
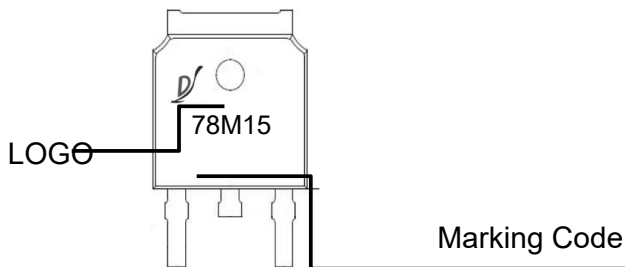
Reflow Condition		Lead-free
Pre Heat	Temp. min($T_s(\min)$)	150°C
	Temp. max($T_s(\min)$)	200°C
	Time(min to max)(t_s)	60~180s
Aver. ramp up rate(Liquidus Temp.)(T_L)to peak		3°C/s max
$T_s(\max)$ to T_L -Ramp-up Rate		3°C/s max
Reflow	Temp.(T_L)(Liquidus)	217°C
	Temp.(t_L)(Liquidus)	60~150s
Peak Temp.(T_P)		260 ^{+0/-5} °C
Time within actual peak Temp.(t_p)		30s max
Ramp-down Rate		6°C/s max
Time 25°C to peak Tempe.(T_p)		8 minutes max
Do not exceed		260°C

8.Dimensions



Dimensions	Inches		Millimeters	
	Min	Max	Min	Max
A	0.087	0.098	2.20	2.50
A1	0.039	0.055	1.00	1.40
A2	0.000	0.006	0.00	0.15
b	0.020	0.028	0.50	0.70
b1	0.028	0.035	0.70	0.90
c	0.016	0.024	0.40	0.60
c1	0.016	0.024	0.40	0.60
D	0.244	0.264	6.20	6.70
D1	0.201	0.217	5.10	5.50
E	0.217	0.236	5.50	6.00
e	0.087	0.094	2.20	2.40
e1	0.173	0.189	4.40	4.80
L	0.382	0.409	9.70	10.40
L1	0.055	0.067	1.40	1.70
L2	0.024	0.047	0.60	1.20

9. Part Marking System





Important Notice and Disclaimer

- Reproducing and modifying information of the document is prohibited without from XINNUO.
- XINNUO reserves the right to make changes to this document and its products and specifications.
- XINNUO disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- XINNUO does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the here in document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. XINNUO makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown her are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify XINNUO for any damages resulting from such improper use or sale.
- Since XINNUO uses lot number as the tracking base, please provide the lot number for tracking when complaining.