

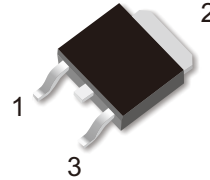
79M15

3-Terminal positive Voltage Regulator

Features:

- ☐ Maximum output current $I_{om}=0.5A$
- ☐ Output voltage $V_o=-15V$
- ☐ Continuous total dissipation $P_D=2W$

TO-252



- 1.GND (G)
2.Input (I)
3.Output (O)

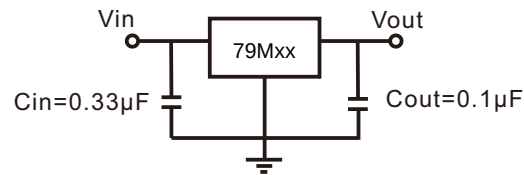
ABSOLUTE MAXIMUM RATINGS(Operating temperature range applies unless otherwise specified)

Parameter	Symbol	Value	Unit
Input Voltage	V_I	-35	V
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	12.5	$^{\circ}C/W$
Operating Junction Temperature Range	T_{OPR}	-20-+125	$^{\circ}C$
Storage Temperature Range	T_{STG}	-55-+150	$^{\circ}C$

ELECTRICAL CHARACTERISTICS($V_i=-17.5V, I_o=350mA, C_i=0.33\mu F, C_o=0.1\mu F$, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output Voltage	V_o	$25^{\circ}C$	-14.75	-15	-15.25	V
		$-17.5 \leq V_i \leq -20V, I_o=5mA-350mA$ $-25^{\circ}C-125^{\circ}C$	-14.75	-15	-15.25	V
Load Regulation	ΔV_o	$I_o=5mA-500mA$ $25^{\circ}C$			100	mV
		$I_o=5mA-200mA$ $25^{\circ}C$			50	mV
Line Regulation	ΔV_o	$-17.5 \leq V_i \leq -25V, I_o=200mA$ $25^{\circ}C$			100	mV
		$-18 \leq V_i \leq -22V, I_o=200mA$ $25^{\circ}C$			50	mV
Quiescent Current	I_q	$25^{\circ}C$			6	mA
Quiescent Current Change	ΔI_q	$-17.5 \leq V_i \leq -25V, I_o=200mA$ $-25^{\circ}C-125^{\circ}C$			0.8	mA
		$5mA \leq I_o \leq 350mA$ $-25^{\circ}C-125^{\circ}C$			0.5	mA
Output Noise Voltage	V_N	$10Hz \leq f \leq 100KHz$ $25^{\circ}C$		40		$\mu V/V_o$
Ripple Rejection	RR	$-18 \leq V_i \leq -28V, f=120Hz, I_o=300mA$ $-25^{\circ}C-125^{\circ}C$	55	80		dB
Dropout Voltage	V_d	$I_o=350mA$ $25^{\circ}C$		2		V
Short Circuit Current	I_{sc}	$V_i=35V$ $25^{\circ}C$		800		mA
Peak Current	I_{PK}	$25^{\circ}C$		0.9		A

Application Circuit



Electrical Characteristics Curve

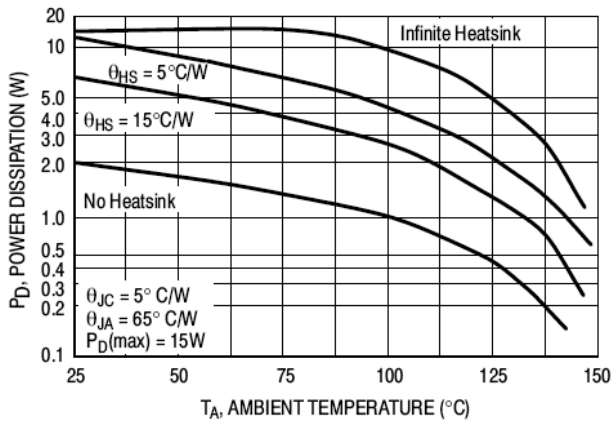


Figure 1. Worst Case Power Dissipation as a Function of Ambient Temperature

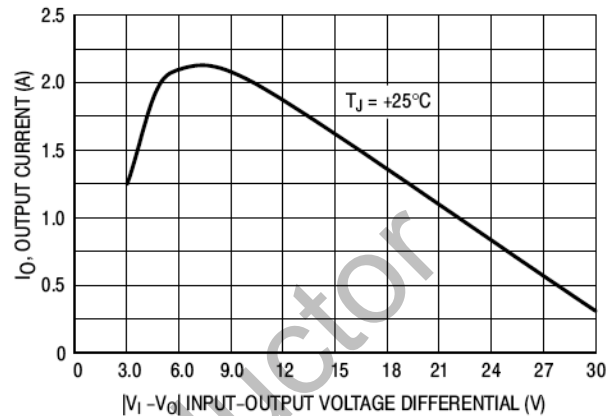


Figure 2. Peak Output Current as a Function of Input-Output Differential Voltage

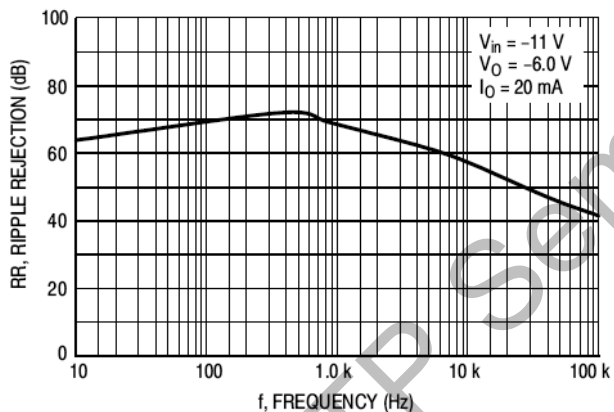


Figure 3. Ripple Rejection as a Function of Frequency

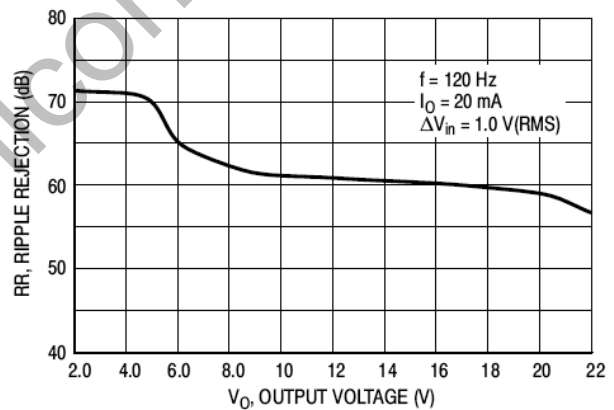
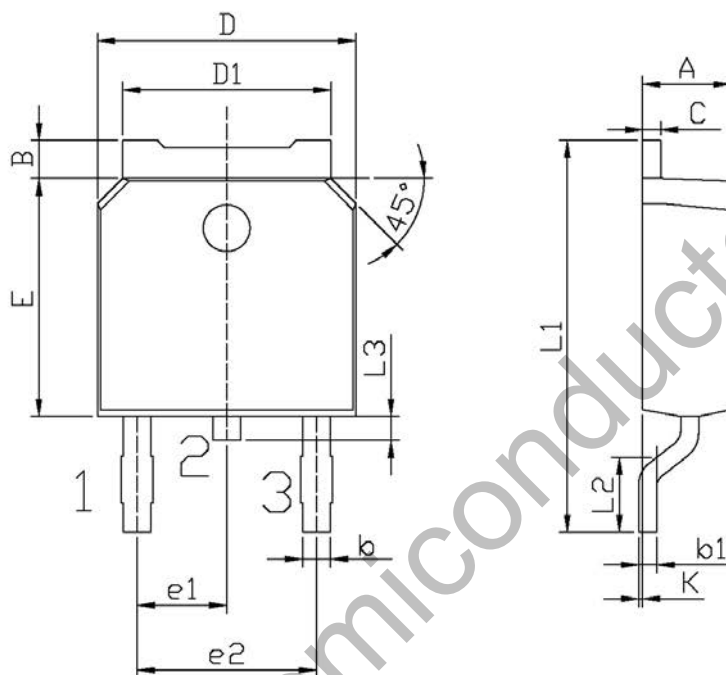


Figure 4. Ripple Rejection as a Function of Output Voltage

Package Dimension

TO-252

Unit: mm



单位: mm

Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
A	2.20	2.40	E	5.95	6.25
B	0.95	1.25	e1	2.24	2.34
b	0.70	0.90	e2	4.43	4.73
b1	0.45	0.55	L1	9.85	10.35
C	0.45	0.55	L2	1.25	1.75
D	6.45	6.75	L3	0.60	0.90
D1	5.20	5.40	K	0.00	0.10