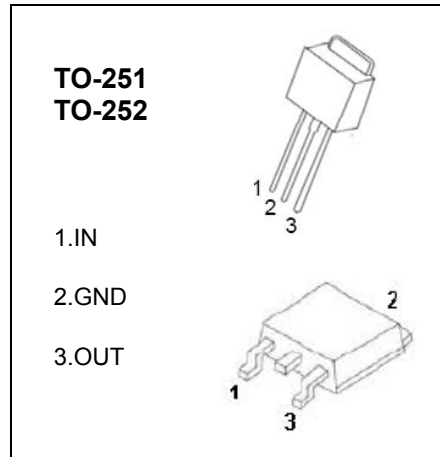


FEATURES

Maximum output current I_{OM} : 0.5 A
 Output voltage V_o : 9V
 Continuous total dissipation
 P_D : 1.25 W ($T_a = 25^\circ\text{C}$)



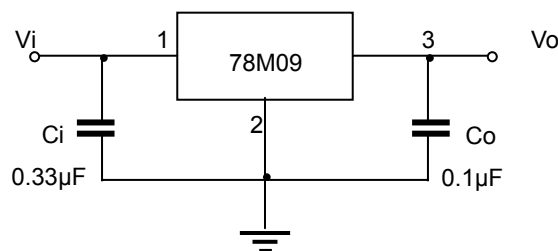
ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

Parameter	Symbol	Value	Unit
Input Voltage	V_i	25	V
Operating Junction Temperature Range	T_{OPR}	-20-+125	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65-+150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE ($V_i=16\text{V}$, $I_o=350\text{mA}$, $C_i=0.33\mu\text{F}$, $C_o=0.1\mu\text{F}$, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output Voltage	V_o	25°C	8.65	9	9.35	V
		$11.5\leq V_i\leq 24\text{V}$, $I_o=5\text{mA}-350\text{mA}$, $P_o\leq 15\text{W}$ $0-125^\circ\text{C}$	8.55	9	9.45	V
Load Regulation	ΔV_o	$I_o=5\text{mA}-500\text{mA}$ 25°C		20	180	mV
		$I_o=5\text{mA}-200\text{mA}$ 25°C		10	90	mV
Line Regulation	ΔV_o	$11.5\text{V}\leq V_i\leq 25\text{V}$, $I_o=200\text{mA}$ 25°C		6	100	mV
		$12\text{V}\leq V_i\leq 25\text{V}$, $I_o=200\text{mA}$ 25°C		2	50	mV
Quiescent Current	I_q	25°C		4.6	6	mA
Quiescent Current Change	ΔI_q	$11.5\text{V}\leq V_i\leq 25\text{V}$, $I_o=200\text{mA}$ $0-125^\circ\text{C}$			0.8	mA
	ΔI_q	$5\text{mA}\leq I_o\leq 350\text{mA}$ $0-125^\circ\text{C}$			0.5	mA
Output Noise Voltage	V_N	$10\text{Hz}\leq f\leq 100\text{KHz}$ 25°C		60		μV
Ripple Rejection	RR	$13\leq V_i\leq 23\text{V}$, $f=120\text{Hz}$, $I_o=300\text{mA}$ $0-125^\circ\text{C}$	56	80		dB
Dropout Voltage	V_d	$I_o=350\text{mA}$ 25°C		2		V
Short Circuit Current	I_{sc}	$V_i=16\text{V}$ 25°C		250		mA
Peak Current	I_{pk}	25°C		0.5		A

TYPICAL APPLICATION



Typical Characteristics

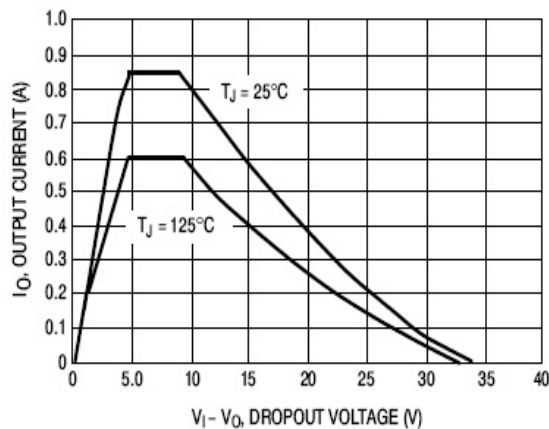


Figure 1. Peak Output Current versus Dropout Voltage

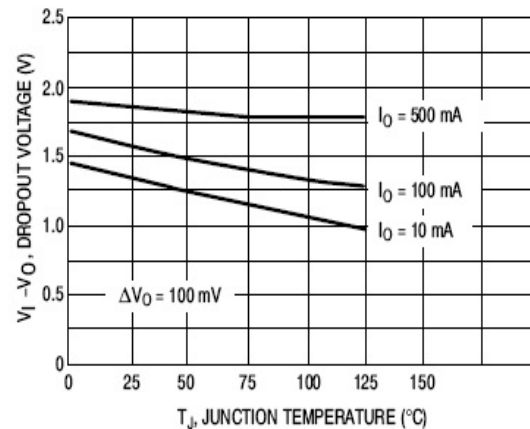


Figure 2. Dropout Voltage versus Junction Temperature

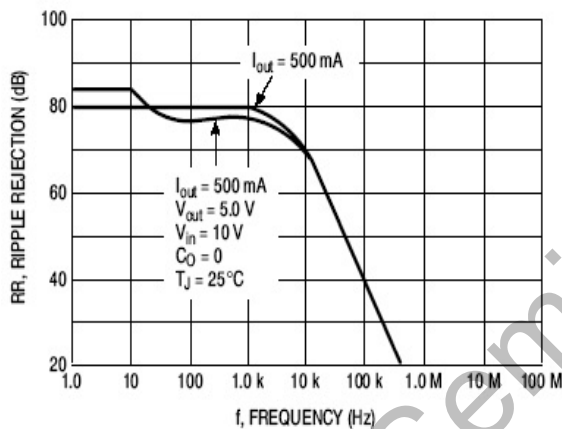


Figure 3. Ripple Rejection versus Frequency

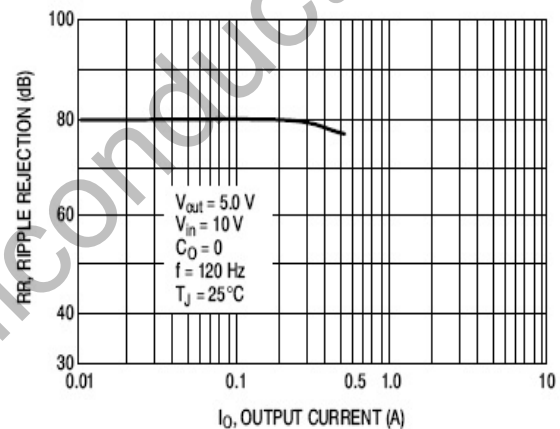


Figure 4. Ripple Rejection versus Output Current

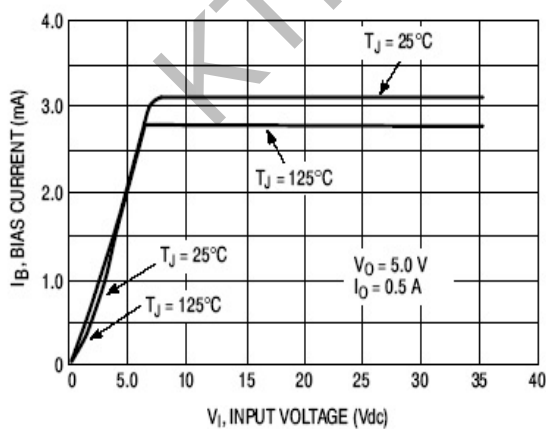


Figure 5. Bias Current versus Input Voltage

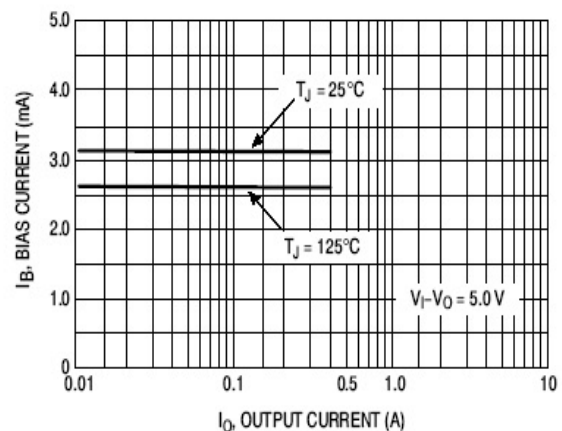


Figure 6. Bias Current versus Output Current