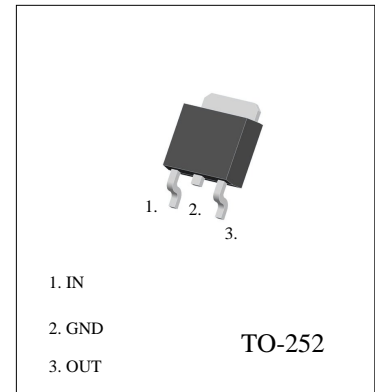


FEATURES

Maximum output current
 $I_{OM}: 0.5\text{ A}$
 Output voltage
 $V_O: 12\text{ V}$
 Continuous total dissipation
 $P_D: 1.25\text{ W}$ ($T_a = 25\text{ }^\circ\text{C}$)
 15 W ($T_c = 25\text{ }^\circ\text{C}$)

78M12

ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies)

Parameter	Symbol	Value	Unit
Input Voltage	V_I	35	V
Operating Junction Temperature Range	TOPR	0-125	$^\circ\text{C}$
Storage Temperature Range	TSTG	-65-150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE ($V_i=10\text{ V}, I_o=350\text{ mA}, C_i=0.33\mu\text{ F}, C_o=0.1\mu\text{ F}$, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output Voltage	V_o	$25\text{ }^\circ\text{C}$	11.5	12	12.5	V
		$14.5\leq V_i\leq 27\text{ V}, I_o=5\text{ mA}-350\text{ mA}$ $P_o\leq 1.25\text{ W}$ $0-125\text{ }^\circ\text{C}$	11.4	12	12.6	V
Load Regulation	ΔV_o	$I_o=5\text{ mA}-500\text{ mA}$ $25\text{ }^\circ\text{C}$		25	240	mV
		$I_o=5\text{ mA}-200\text{ mA}$ $25\text{ }^\circ\text{C}$		10	120	mV
Line Regulation	ΔV_o	$14.5\text{ V}\leq V_i\leq 30\text{ V}, I_o=200\text{ mA}$ $25\text{ }^\circ\text{C}$		10	100	mV
		$16\text{ V}\leq V_i\leq 30\text{ V}, I_o=200\text{ mA}$ $25\text{ }^\circ\text{C}$		3	50	mV
Quiescent Current	I_q	$25\text{ }^\circ\text{C}$		4.6	6	mA
Quiescent Current Change	ΔI_q	$14.5\text{ V}\leq V_i\leq 30\text{ V}, I_o=200\text{ mA}$ $0-125\text{ }^\circ\text{C}$			0.8	mA
	ΔI_q	$5\text{ mA}\leq I_o\leq 350\text{ mA}$ $0-125\text{ }^\circ\text{C}$			0.5	mA
Output Noise Voltage	V_N	$10\text{ Hz}\leq f\leq 100\text{ KHz}$ $25\text{ }^\circ\text{C}$		75		$\mu\text{ V}$
Ripple Rejection	RR	$15\leq V_i\leq 25\text{ V}, f=120\text{ Hz}, I_o=300\text{ mA}$ $0-125\text{ }^\circ\text{C}$	55	80		dB
Dropout Voltage	V_d	$I_o=350\text{ mA}$ $25\text{ }^\circ\text{C}$		2		V
Short Circuit Current	I_{sc}	$V_i=19\text{ V}$ $25\text{ }^\circ\text{C}$		240		mA
Peak Current	I_{pk}	$25\text{ }^\circ\text{C}$		0.7		A