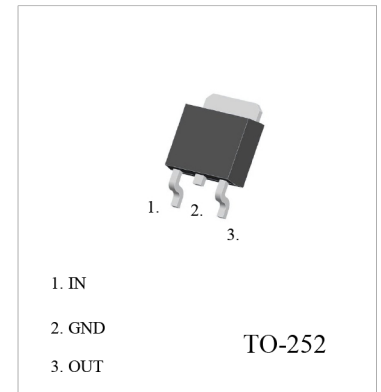


FEATURES

Maximum output current
 $I_{OM}: 0.5\text{ A}$
 Output voltage
 $V_O: 5\text{ V}$
 Continuous total dissipation
 $P_D: 1.25\text{ W}$

78M05



ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies)

Parameter	Symbol	Value	Unit
Input Voltage	V_I	25	V
Operating Junction Temperature Range	TOPR	0-125	°C
Storage Temperature Range	TSTG	-65-150	°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°C	4.8	5	5.2	V
		$7\text{V} \leq V_i \leq 20\text{V}, I_o=5\text{mA}-350\text{mA}$ $P_o \leq 15\text{W}$	0-125°C	4.75	5	5.25	V
Load Regulation	ΔV_o	$I_o=5\text{mA}-0.5\text{A}$	25°C		15	100	mV
		$I_o=5\text{mA}-200\text{mA}$	25°C		5	50	mV
Line Regulation	ΔV_o	$7\text{V} \leq V_i \leq 25\text{V}, I_o=200\text{mA}$	25°C		3	100	mV
		$8\text{V} \leq V_i \leq 25\text{V}, I_o=200\text{mA}$	25°C		1	50	mV
Quiescent Current	I_q		25°C		4.2	6	mA
Quiescent Current Change	ΔI_q	$8\text{V} \leq V_i \leq 25\text{V}, I_o=200\text{mA}$	0-125°C			0.8	mA
	ΔI_q	$5\text{mA} \leq I_o \leq 350\text{mA}$	0-125°C			0.5	mA
Output Noise Voltage	V_N	$10\text{Hz} \leq f \leq 100\text{KHz}$	25°C		40	200	µV
Ripple Rejection	RR	$8\text{V} \leq V_i \leq 18\text{V}, f=120\text{Hz}, I_o=300\text{mA}$	0-125°C	62	80		dB
Dropout Voltage	V_d	$I_o=350\text{mA}$	25°C		2	2.5	V
Short Circuit Current	I_{sc}	$V_i=10\text{V}$	25°C		300		mA
Peak Current	I_{pk}		25°C		0.5		A