

FEATURES

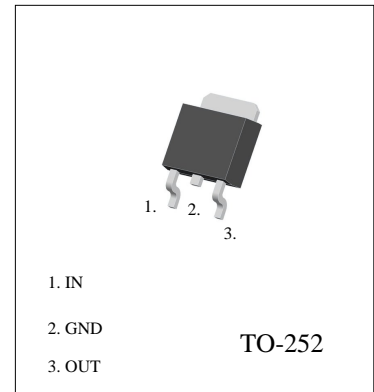
Maximum output current

 $I_{OM}: 0.5\text{ A}$

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
		$7\text{V} \leq V_i \leq 20\text{V}$, $I_o=5\text{mA}-350\text{mA}$ $P_o \leq 15\text{W}$	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	$8\text{V} \leq V_i \leq 25\text{V}$, $I_o=200\text{mA}$	$0-125^\circ\text{C}$		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	40	200	μV
Ripple Rejection	RR	$8\text{V} \leq V_i \leq 18\text{V}$, $f=120\text{Hz}$, $I_o=300\text{mA}$	$0-125^\circ\text{C}$	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