

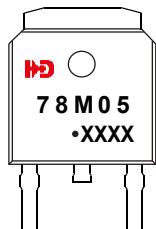
TO-252-2L Plastic-Encapsulate Voltage Regulators

Three-terminal positive voltage regulator

Feature

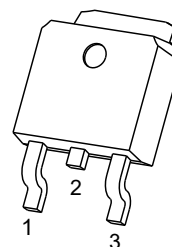
- Maximum Output current I_{OM} : 0.5A
- Output Voltage V_O : 5V
- Continuous Total Dissipation P_D : 1.25W

MARKING



78M05= Device code
Solid dot = Green molding compound device
if none, the normal device
XXXX = Code

TO-252-2L



1.IN
2.GND
3.OUT

Limiting Values (Absolute Maximum Rating)

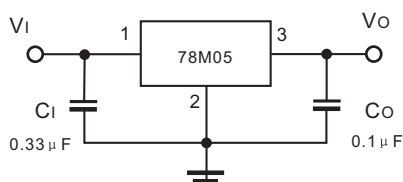
Parameter	Symbol	Rating	Unit
Input Voltage	V_I	35	V
Operating Junction Temperature Range	T_{OPR}	-55 ~ +125	°C
Storage Temperature Range	T_{STG}	-65 ~ +150	°C

Electrical Characteristics

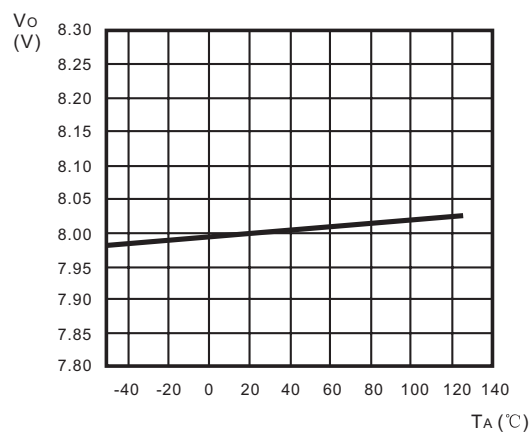
($V_{IN} = 10V$, $I_{OUT} = 350mA$, $C_{IN} = 0.33\mu F$, $C_{OUT} = 0.1\mu F$, $T_J = 25^\circ C$, unless otherwise specified)

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Output Voltage	V_O	$T_J = 25^\circ C$	4.8	5.0	5.2	V
		$T_J = 0 \sim 125^\circ C$, $7V \leq V_I \leq 20V$, $I_O = 5mA \sim 350mA$, $P_O \leq 15W$	4.75	5.0	5.25	V
Load Regulation	ΔV_O	$T_J = 25^\circ C$, $I_O = 5mA \sim 0.5A$		15	100	mV
		$T_J = 25^\circ C$, $I_O = 5mA \sim 200mA$		5	50	mV
Line Regulation	ΔV_O	$T_J = 25^\circ C$, $7V \leq V_I \leq 25V$, $I_O = 200mA$		3	100	mV
		$T_J = 25^\circ C$, $8V \leq V_I \leq 25V$, $I_O = 200mA$		1	50	mV
Quiescent Current	I_Q	$T_J = 25^\circ C$		4.2	6	mA
Quiescent current Change	ΔI_Q	$T_J = 0 \sim 125^\circ C$, $8V \leq V_I \leq 25V$, $I_O = 200mA$			0.8	mA
		$T_J = 0 \sim 125^\circ C$, $5mA \leq I_O \leq 350mA$			0.5	mA
Output Noise Voltage	V_N	$T_J = 25^\circ C$, $10Hz \leq f \leq 100KHz$		40	200	μV
Ripple Rejection	RR	$T_J = 0 \sim 125^\circ C$, $8V \leq V_I \leq 18V$, $f = 120Hz$, $I_O = 300mA$	62	80		dB
Dropout Voltage	V_D	$T_J = 25^\circ C$, $I_O = 350mA$		2	2.5	V
Short Circuit Current	I_{SC}	$T_J = 25^\circ C$, $V_I = 10V$		300		mA
Peak Current	I_{PK}	$T_J = 25^\circ C$		0.5		A

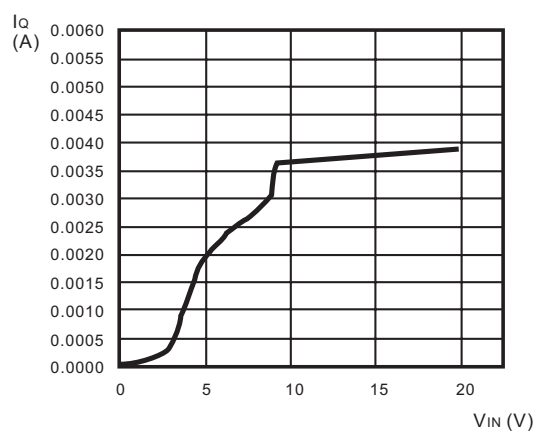
TYPICAL APPLICATION



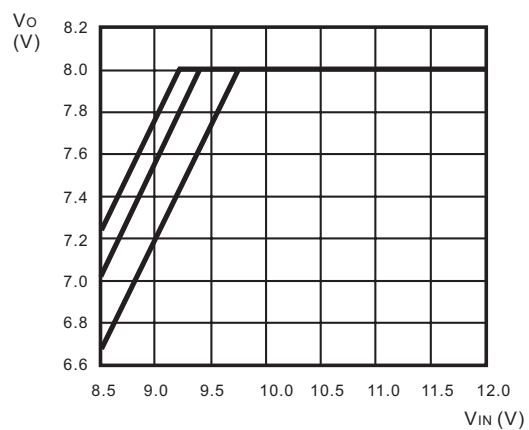
Typical Characteristics



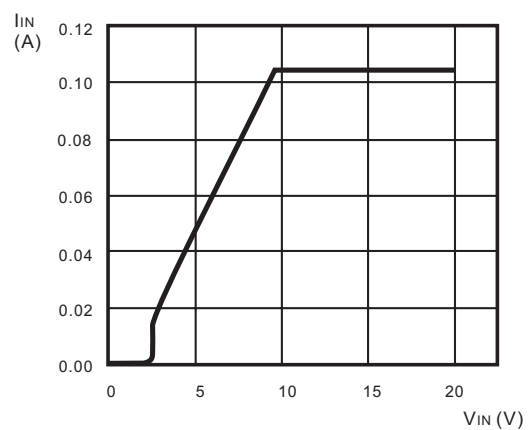
Ambient Temperature vs Output Voltage



Input Voltage vs Quiescent Current ($T_J = 25^\circ\text{C}$)

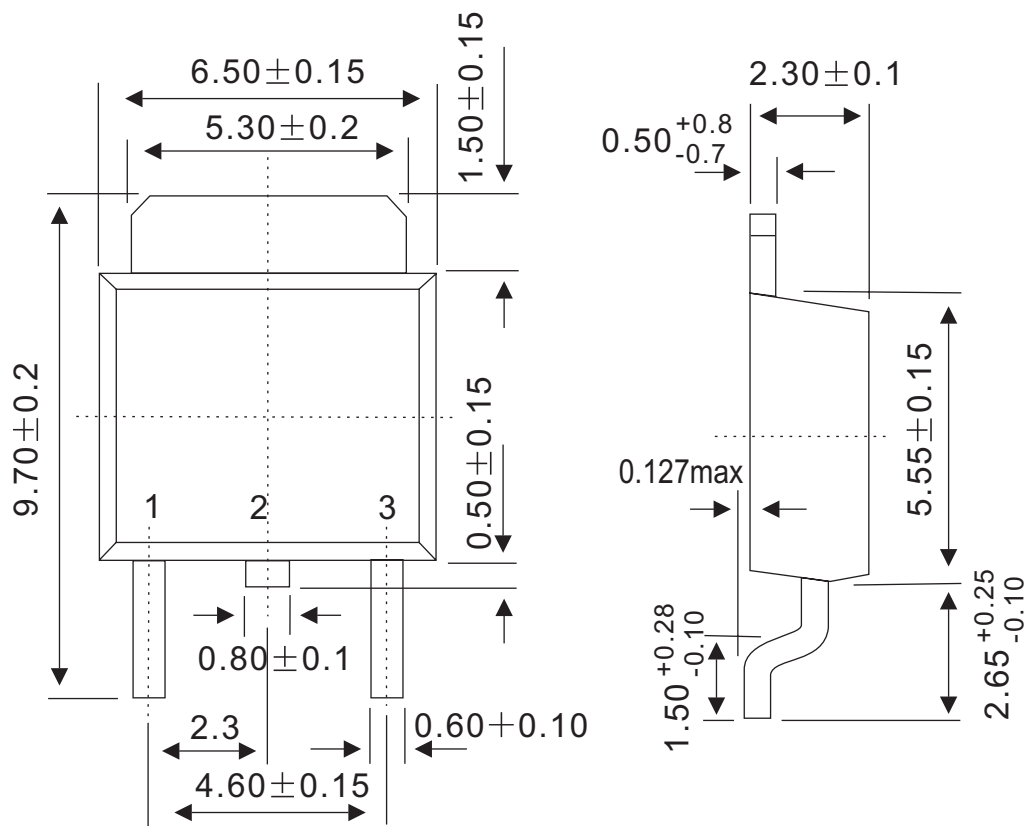


Input Voltage vs Output Voltage ($T_J = 25^\circ\text{C}$)

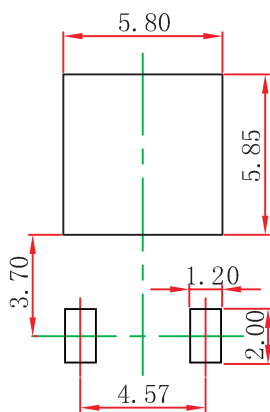


Input Voltage vs Input Current ($T_J = 25^\circ\text{C}$)

TO-252-2L Package Outline Dimensions



TO-252-2L Suggested Pad Layout



- Note:**
- 1. Controlling dimension: in millimeters.
 - 2. General tolerance: $\pm 0.05\text{mm}$.
 - 3. The pad layout is for reference purposes only.

NOTICE

JSJD reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. JSJD does not assume any liability arising out of the application or use of any product described herein.