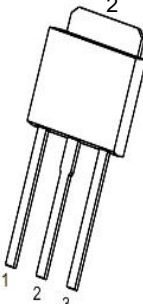
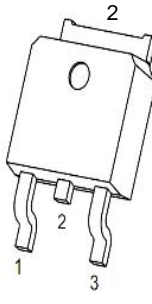
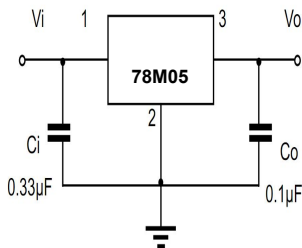


Three-terminal positive voltage regulator	TO-252/TO-251 Plastic-Encapsulate Voltage Regulators
<p style="text-align: center;"><u>TO-252/TO-251</u></p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> </div> <p>1.IN 2.GND 3.OUT</p> <p style="margin-top: 20px;">Marking : 78M05 D / U ****</p>	<p>Features</p> <ul style="list-style-type: none"> ※ Maximum output current IOM: 0.5 A ※ Output voltage VO: 5V ※ Continuous total dissipation PD: 1.25W <p>TYPICAL APPLICATION:</p> <div style="text-align: center;">  </div>

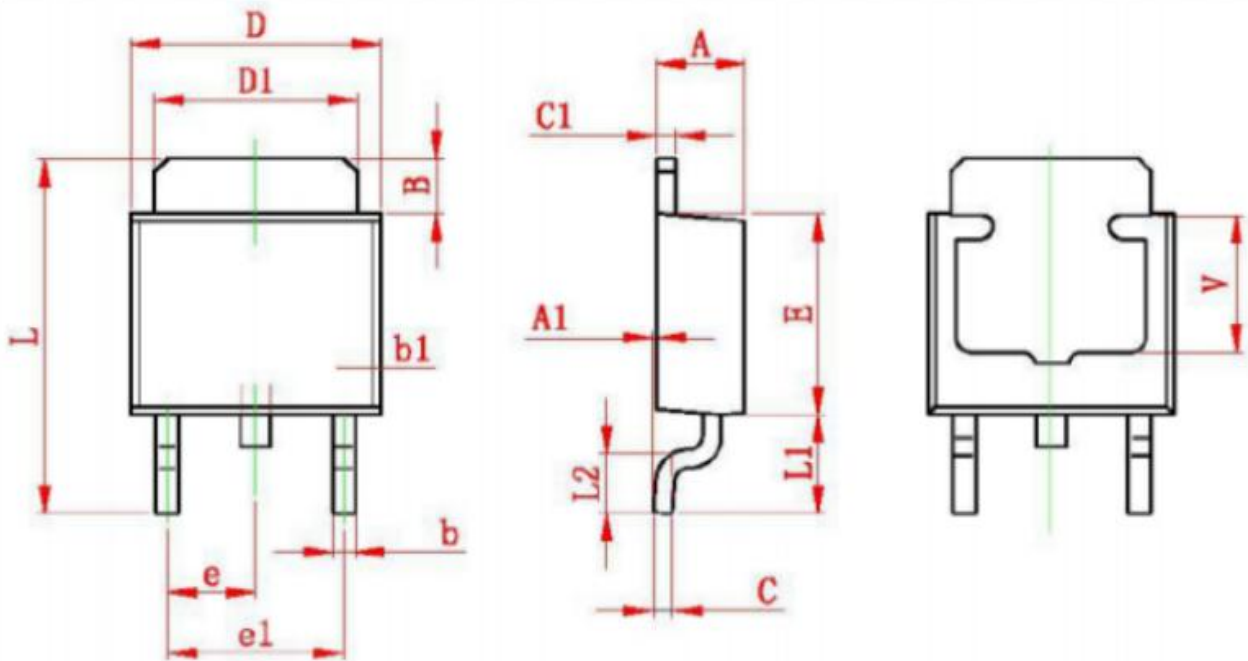
Absolute Maximum ratings (Operating temperature range applies unless otherwise specified)

Parameter	Symbol	Value	Unit
Input Voltage	V_i	35	V
Thermal Resistance From Junction to air	$R_{\theta JA}$	100	$^{\circ}C/W$
Operating Junction Temperature Range	TOPR	-25~+125	$^{\circ}C$
Storage Temperature Range	TSTG	-55~+150	$^{\circ}C$

Electrical Characteristics At Specified Virtual Junction Temperature ($V_i=10V$, $I_o=350mA$, $C_i=0.33\mu F$, $C_o=0.1\mu F$. Unless Otherwise Specified)

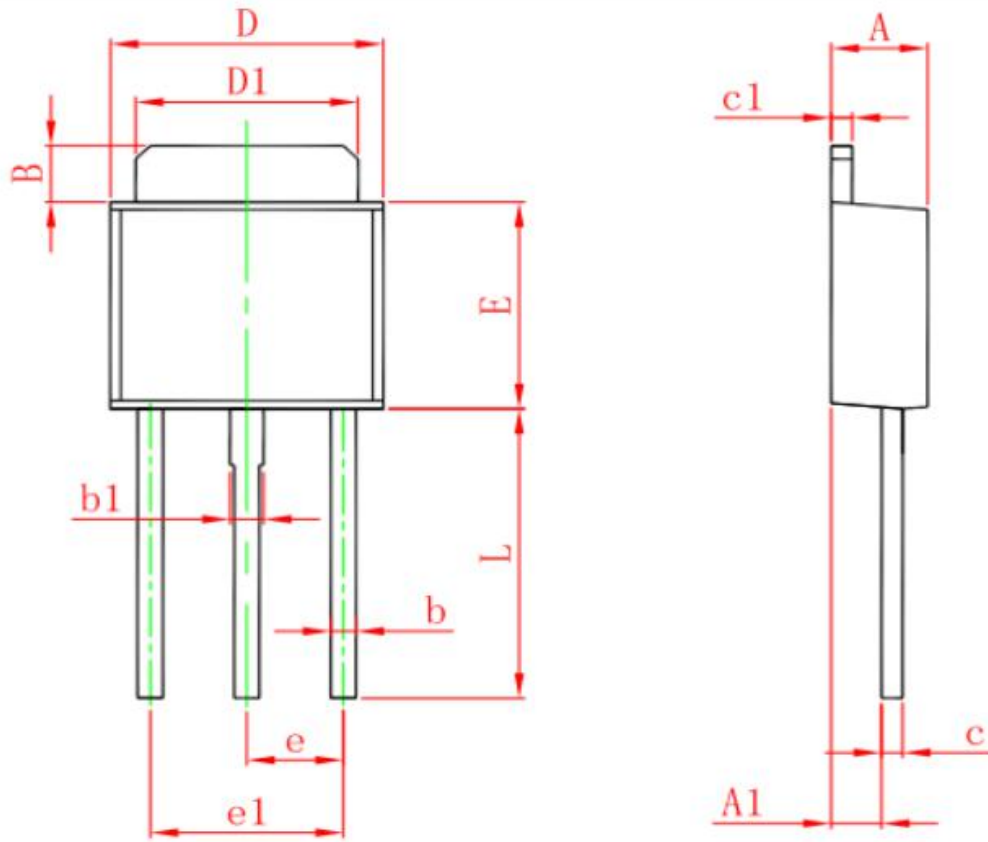
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Output voltage	V_O	$25^{\circ}C$	4.8	5	5.2	V
		$7V \leq V_i \leq 20V, I_o = 5mA - 350mA$	-25~+125	4.75	5	5.25
Load Regulation	ΔV_O	$I_o = 5mA - 0.5A, V_i = 10V$	$25^{\circ}C$	15	100	mV
		$I_o = 5mA - 200mA, V_i = 10V$	$25^{\circ}C$	5	50	mV
Line Regulation	ΔV_O	$10.5V \leq V_i \leq 25V, I_o = 200mA$	$25^{\circ}C$	3	100	mV
		$11V \leq V_i \leq 25V, I_o = 200mA$	$25^{\circ}C$	1	50	mV
Quiescent Current	I_q	$25^{\circ}C$		4.2	6	mA
Quiescent Current Change	ΔI_q	$10.5V \leq V_i \leq 25V, I_o = 200mA$	-25~+125		0.8	mA
		$5mA \leq I_o \leq 350mA$	-25~+125		0.5	mA
Output Noise Voltage	V_N	$10Hz \leq f \leq 100KHz$	$25^{\circ}C$	40	200	$\mu V/V_o$
Ripple Rejection	R_r	$11.5V \leq V_i \leq 21.5V, f = 120Hz, I_o = 300mA$	-25~+125	62	80	dB
Dropout Voltage	V_d	$I_o = 350mA$	$25^{\circ}C$	2	2.5	V
Short Circuit Current	I_{sc}	$V_i = 10V$	$25^{\circ}C$	300		mA
Peak Current	IPK	$25^{\circ}C$		0.5		A

Package Dimensions:



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	2.200	2.400	0.087	0.094
A1	0.000	0.127	0.000	0.005
B	1.350	1.650	0.053	0.065
b	0.500	0.700	0.020	0.028
b1	0.700	0.900	0.028	0.035
c	0.430	0.580	0.017	0.023
c1	0.430	0.580	0.017	0.023
D	6.350	6.650	0.250	0.262
D1	5.200	5.400	0.205	0.213
E	5.400	5.700	0.213	0.224
e	2.300 TYP		0.091 TYP	
e1	4.500	4.700	0.177	0.185
L	9.500	9.900	0.374	0.390
L1	2.550	2.900	0.100	0.114
L2	1.400	1.780	0.055	0.070
V	3.80 REF		0.150 REF	

Package Dimensions:



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	2.200	2.400	0.087	0.094
A1	1.050	1.350	0.042	0.054
B	1.350	1.650	0.053	0.065
b	0.500	0.700	0.020	0.028
b1	0.700	0.900	0.028	0.035
c	0.430	0.580	0.017	0.023
c1	0.430	0.580	0.017	0.023
D	6.350	6.650	0.250	0.262
D1	5.200	5.400	0.205	0.213
E	5.400	5.700	0.213	0.224
e	2.300 TYP.		0.091 TYP.	
e1	4.500	4.700	0.177	0.185
L	7.500	7.900	0.295	0.311