DESCRIPTION

The A78M05 is available in TO-252 package.

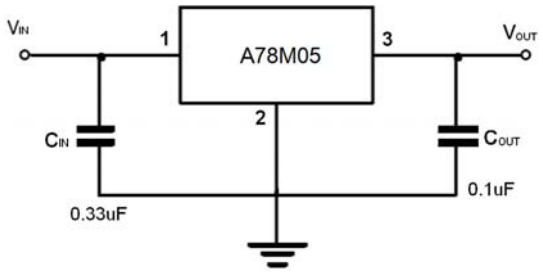
FEATURES

- Output Current in Excess of 0.5A
- Output Voltage is 5V
- Internal thermal Overload protection
- Internal Short Circuit Current Limiting
- Available in TO-252 Package

ORDER INFORMATION

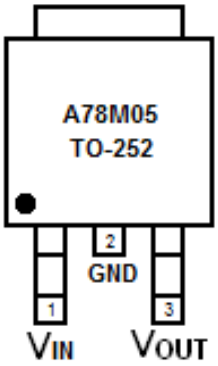
Package Type	Part Number	
TO-252	D	A78M05DR
		A78M05DVR
Note	R: Tape & Reel V: Halogen free Package	
AiT provides all RoHS free products Suffix " V " means Halogen free Package		

TYPICAL APPLICATION



NOTE: Bypass capacitors are recommended for optimum stability and transient response and should be located as close as possible to the regulators.

PIN DESCRIPTION



Top View

Pin #	Symbol	Function
1	V_{IN}	Supply Input
2	GND	Ground
3	V_{OUT}	Output

ABSOLUTE MAXIMUM RATINGS

T_A=25°C

V_{IN}, Input Voltage	35 V
T_{OPR}, Operating Temperature	-40℃ to 85℃
T_{STG}, Storage Temperature Range	-55℃ to 150℃

Stresses above may cause permanent damage to the device. These are stress ratings only, and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics is not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

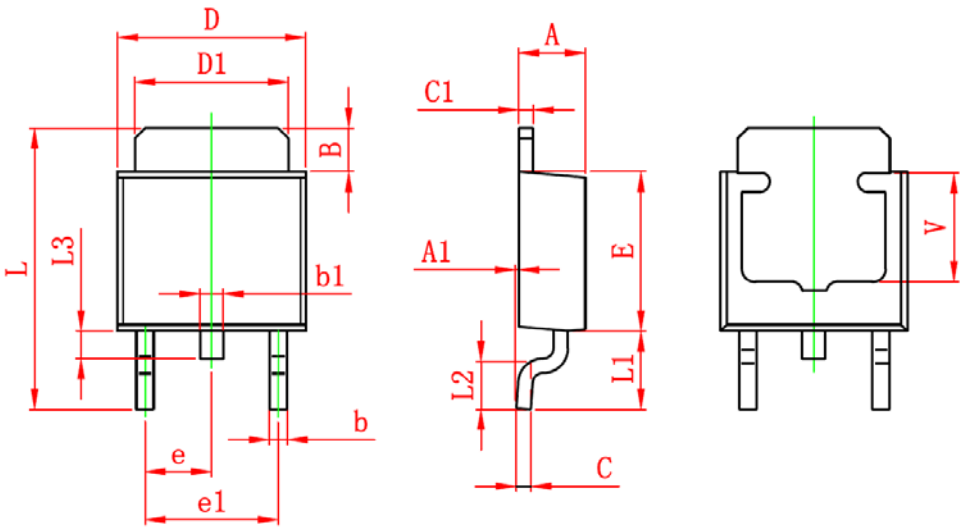
ELECTRICAL CHARACTERISTICS

V_{IN}=10V, I_{OUT}=350mA, -30°C<T_J<85°C, C1=0.33uF, C_{OUT}=0.1uF,unless otherwise noted

Parameter	Symbol	Conditions	Min	Typ.	Max	Unit
Output Voltage	V_{OUT}	T_J=25°C	4.8	5	5.2	V
		7V≤V_{IN}≤20V, I_{OUT}=5mA~350mA	4.75	5	5.25	
Load Regulation	ΔV_{OUT}	T_J=25°C, I_{OUT}=5mA ~ 500mA	-	25	100	mV
		T_J=25°C, I_{OUT}=5mA ~ 200mA	-	10	50	
Line Regulation	ΔV_{OUT}	7V≤V_{IN}≤25V, I_{OUT}=200mA, T_J=25°C	-	4	100	mV
		8V≤V_{IN}≤25V, I_{OUT}=200mA, T_J=25°C	-	2	50	
Quiescent Current	Iq	T_J=25°C	-	4	6	mA
Quiescent Current Change	ΔIq	8V≤V_{IN}≤25V, I_{OUT}=200mA	-	-	0.8	mA
		5mA≤I_{OUT}≤350mA	-	-	0.5	mA
Output Noise Voltage	VN	10Hz≤ f ≤100KHz, T_J=25°C	-	40	200	uV
Dropout Voltage	V_D	T_J=25°C	-	2	-	V
Ripple Rejection	RR	8V≤V_{IN}≤18V, f=120Hz, I_{OUT}=300mA, T_J=25°C	56	80	-	dB
Short Circuit Current Limit	I_{SC}	T_J=25°C	-	0.8	-	A

PACKAGE INFORMATION

Dimension in TO-252 (Unit: mm)



Symbol	Min	Max
A	2.200	2.400
A1	0.000	0.127
B	1.350	1.650
b	0.500	0.700
b1	0.700	0.900
c	0.430	0.580
c1	0.430	0.580
D	6.350	6.650
D1	5.200	5.400
E	5.400	5.700
e	2.300 TYP.	
e1	4.500	4.700
L	9.500	9.900
L1	2.550	2.900
L2	1.400	1.780
L3	0.600	0.900
V	3.800 REF.	

IMPORTANT NOTICE

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