



ZHEJIANG UNIÜ-NE Technology CO., LTD

浙江宇力微新能源科技有限公司



78S05M Data Sheet

V 1.1

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Positive voltage regulators

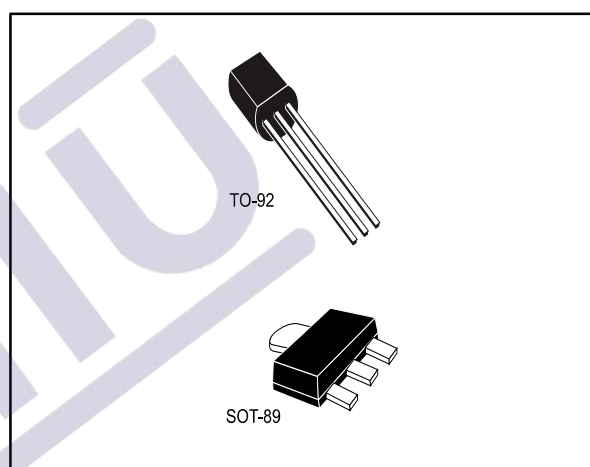
Description

The 78S05M series of three terminal positive regulators employ internal current limiting and thermal shutdown, making them essentially indestructible. If adequate heat-sink is provided, they can deliver up to 150 mA output current.

They are intended as fixed voltage regulators in a wide range of applications including local or on-card regulation for elimination of noise and distribution problems associated with single-point regulation. In addition, they can be used with power pass elements to make high-current voltage regulators. The 78S05M series used as Zener diode/resistor combination replacement, offers improvement along with lower quiescent current and lower noise.

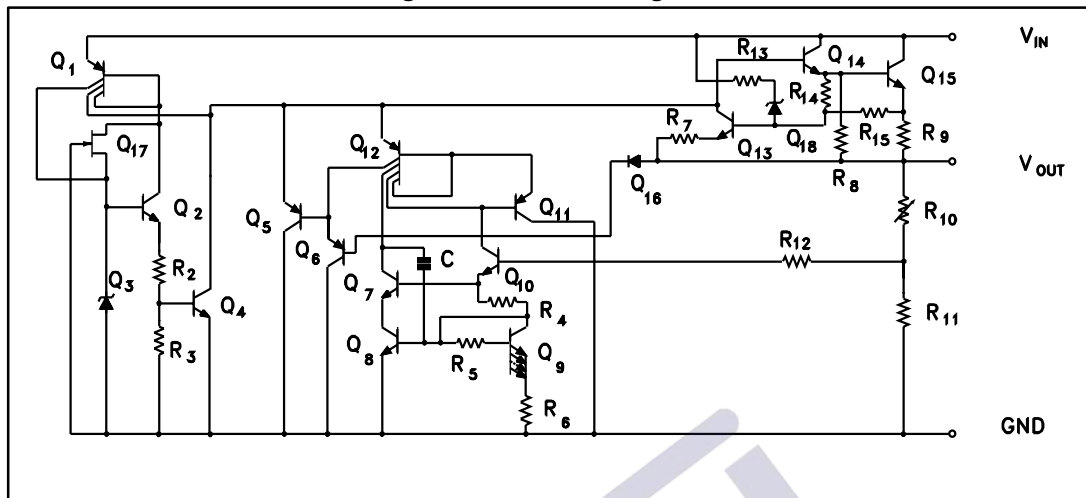
Features

- Output current up to 150 mA
- Output voltages of 5V thermal overload protection
- Internal Short Circuit Current Limiting
- No external components are required
- Available in $\pm 2\%$



Diagram

Figure 1: Schematic diagram



Pin configuration

Figure 2: Pin connection (top view, bottom view for TO-92)

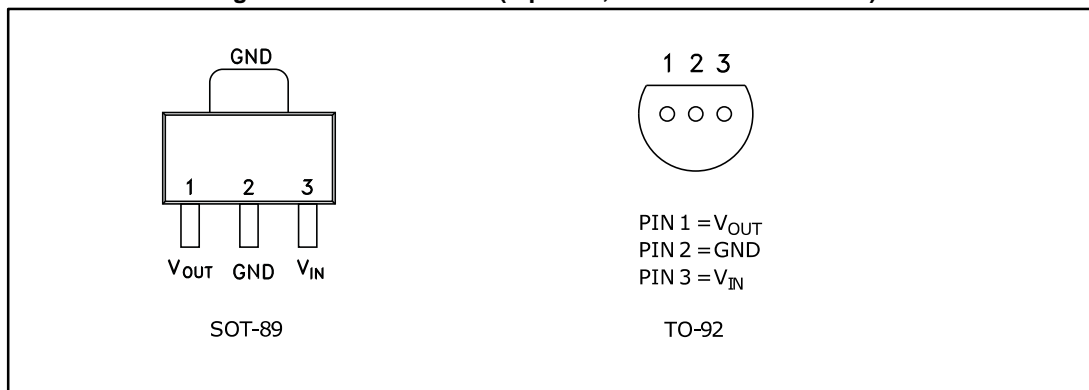
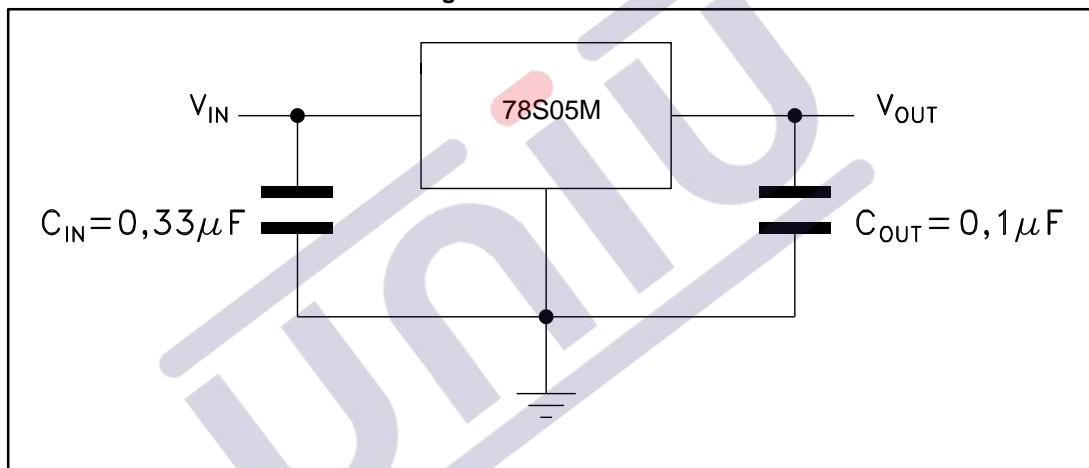


Figure 3: Test circuits



Maximum ratings

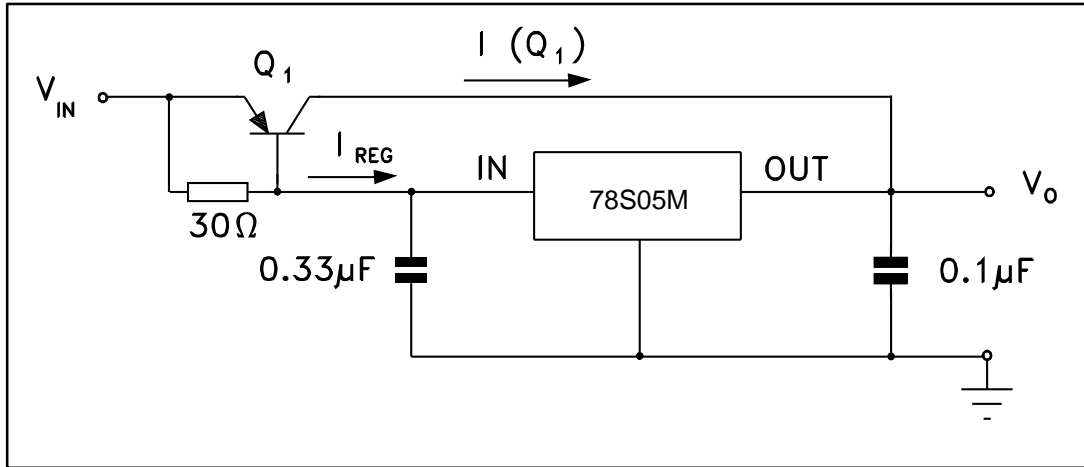
Table 1: Absolute maximum ratings

Symbol	Parameter	Value	Unit
V _I	DC Input voltage	V _O = 3.3 to 9 V	30
		V _O = 12 to 15 V	35
I _O	Output current	150	mA
T _{OP}	Operating junction temperature range	-40 to 125	°C
T _{STG}	Storage temperature range	-55 to 150	°C
P _D	Power dissipation	TO92	500
		SOT89	500

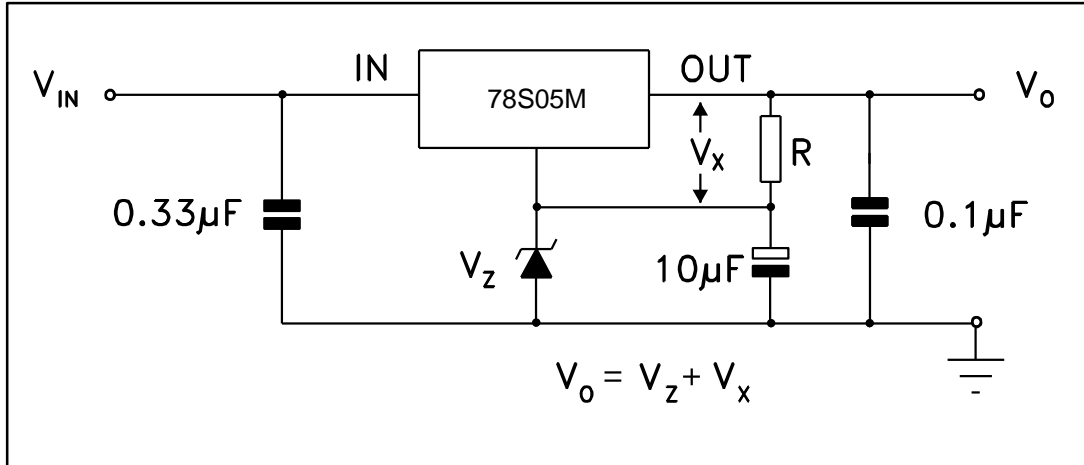
UNI-SEMICONDUCTOR

Typical application

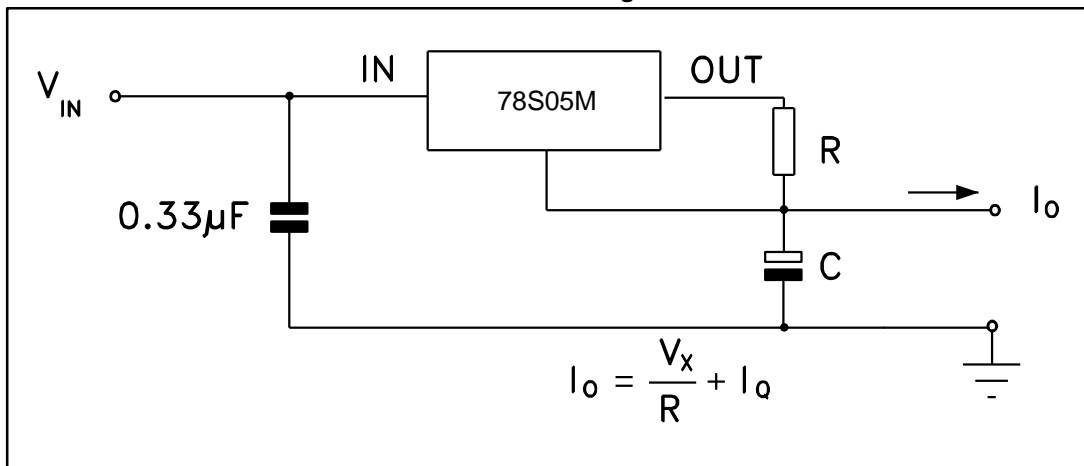
High output current short-circuit protected



Output boost circuit



Current regulator



1.版本记录

DATE	REV.	DESCRIPTION
2018/04/19	1.0	First Release
2021/11/10	1.1	Layout adjustment

2.免责声明

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