

Three-terminal positive voltage regulator

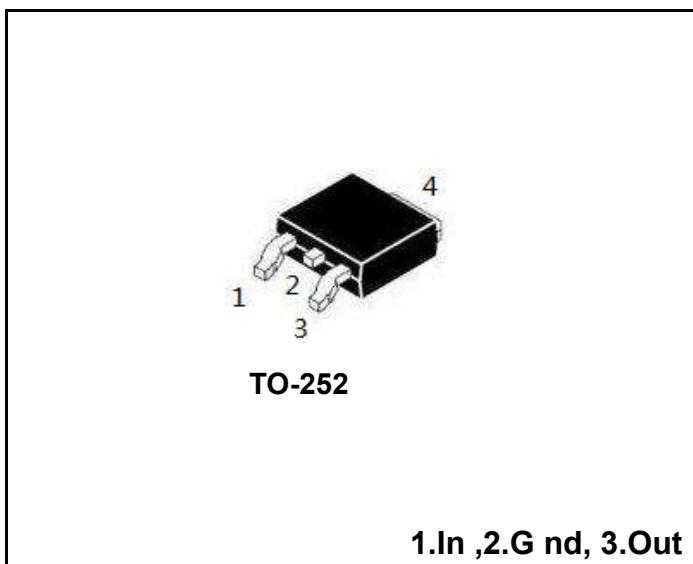
FEATURES

- Maximum output current I_{OM}: 1.0A
- Output voltage V_O: 5V
- Continuous total dissipation PD: 1.25 W

ABSOLUTE MAXIMUM RATINGS

Operating temperature range applies unless otherwise specified

Parameter	Symbol	Value	Unit
Input Voltage	V	35	V
Operating Junction Temperature Range	T _{OPR}	0~+125	°C
Storage Temperature Range	T	-65~+150	°C

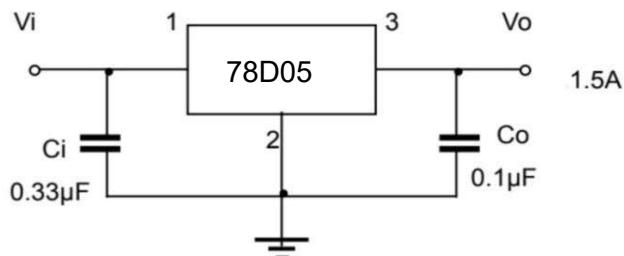


ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE

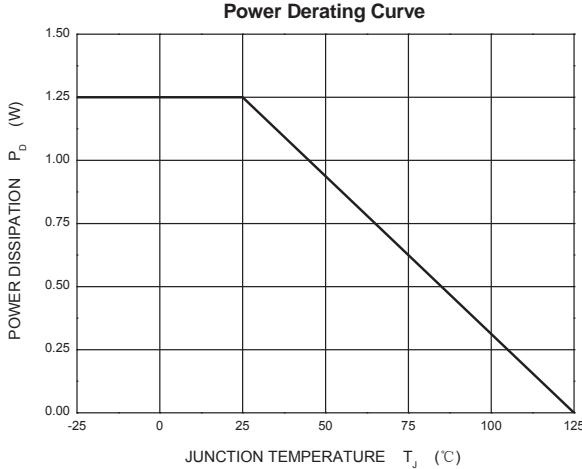
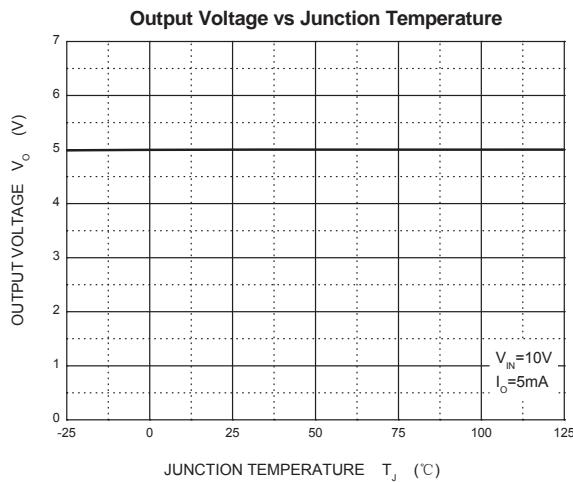
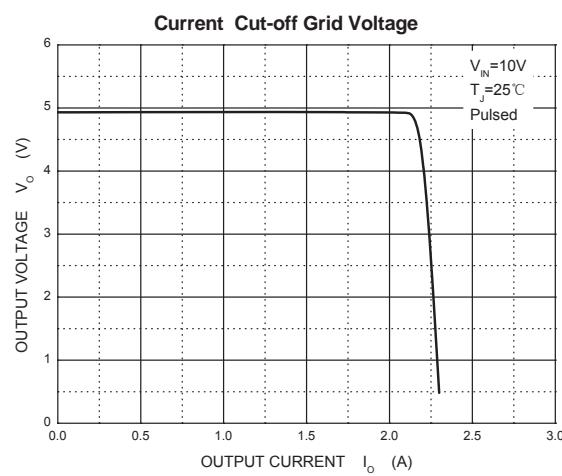
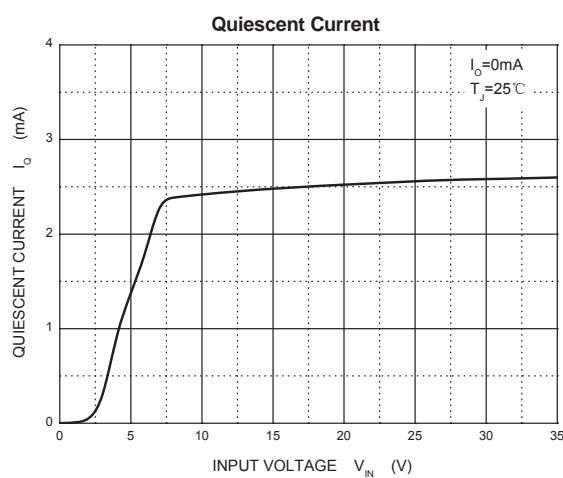
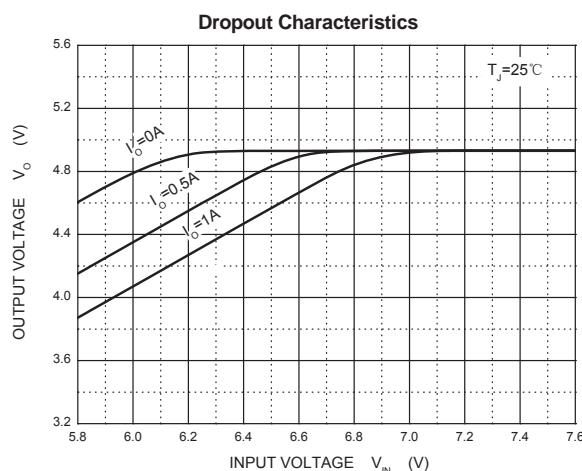
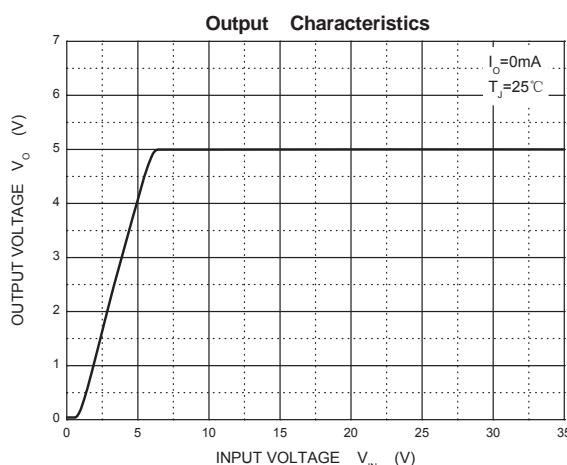
(Vi=10V, Io=350mA, Ci=0.33μF, Co=0.1μF, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output Voltage	V _O	25 °C	4.8	5.0	5.2	V
		8V≤V _i ≤20V, Io=5mA-1.0A	-25-125 °C	4.75	5.00	5.25
Load Regulation	ΔV _O	Io=5mA-1.0A	25 °C		9	mV
		Io=250mA-750mA	25 °C		4	mV
Line Regulation	ΔV _O	7.5V≤V _i ≤20V Io=250mA	25 °C		4	mV
		8V≤V _i ≤12V Io=250mA	25 °C		2	mV
Quiescent Current	I _Q		25 °C		4.2	mA
Quiescent Current Change	ΔI _Q	7.5V≤V _i ≤25V Io=500mA	-25-125 °C		0.3	mA
		5mA≤I _O ≤1.0A	-25-125 °C		0.03	mA
Output Noise Voltage	V _N	10Hz≤f≤100KHz	25 °C		42	μV/V _O
Output voltage drift	ΔV _O /ΔT	Io=5mA	-25-125 °C		-0.3	mV/°C
Ripple Rejection	RR	8V≤V _i ≤18V, f=120Hz	-25-125 °C	62	73	dB
Dropout Voltage	V _d	Io=1.0A	25 °C		2	V
Output resistance	R _O	f=1KHz	25 °C		10	mA
Short Circuit Current	I _{SC}		25 °C		200	mA
Peak Current	I _{PK}		25 °C		2.2	A

TYPICAL CHARACTERISTICS



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

RATINGS AND CHARACTERISTIC CURVES


Package Outline Dimensions millimeters

TO-252

The diagram illustrates the TO-252 package outline with two views: a top view showing the lead configuration and a side view showing the profile. Key dimensions are labeled: A (lead thickness), B (lead height), C (lead pitch), D (width), D1 (lead width), E (lead gap), E1 (lead gap), E2 (lead gap), L1 (lead length), L2 (lead length), L3 (lead length), B1, B2, and B3 (lead height). Pin numbers 1, 2, and 3 are also indicated.

Dim.	Min.	Max.
A	2.1	2.5
B	1.3	1.7
C	0.4	0.6
D	6.4	6.7
D1	5.1	5.5
E	5.5	6.0
E1	Typ2.3	
E2	Typ4.6	
B1	0.6	0.8
B2	0.75	0.95
B3	0.35	0.45
L1	9.0	10.0
L2	1.4	1.6
L3	0.75	0.95

All Dimensions in millimeter