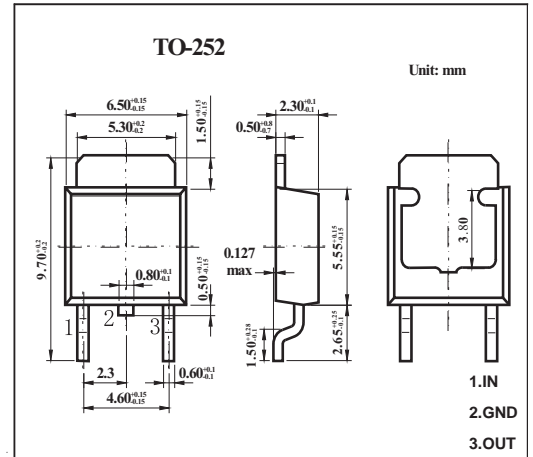


Three-terminal positive voltage regulator
FEATURES

- Maximum output current IOM: 1.5 A
- Output voltage V_O : 5V
- Continuous total dissipation PD: 1.25 W

MECHANICAL DATA

- Case: TO-252 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Mounting Position: Any


MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Value	Unit
Input Voltage	V_i	35	V
Thermal Resistance from Junction to Air	$R_{\theta JA}$	80	°C/W
Operating Junction Temperature Range	T_{OPR}	-25~+125	°C
Storage Temperature Range	T_{STG}	-65~+150	°C

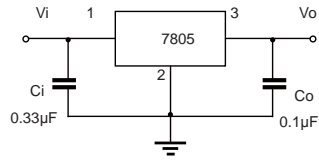
ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE
 ($V_i=10V, I_o=500mA, C_i=0.33\mu F, C_o=0.1\mu F$, unless otherwise specified)

Parameter	Symbol	Test conditions		Min	Typ	Max	Unit
Output Voltage	V_o		25°C	4.8	5.0	5.2	V
		$7V \leq V_i \leq 20V, I_o=5mA-1A$	-25-125°C	4.75	5.00	5.25	V
Load Regulation	ΔV_o	$I_o=5mA-1.5A$	25°C		9	100	mV
		$I_o=250mA-750mA$	25°C		4	50	mV
Line Regulation	ΔV_o	$7V \leq V_i \leq 25V$	25°C		4	100	mV
		$8V \leq V_i \leq 12V$	25°C		1.6	50	mV
Quiescent Current	I_q		25°C		5	8	mA
Quiescent Current Change	ΔI_q	$7V \leq V_i \leq 25V$	-25-125°C		0.3	1.3	mA
		$5mA \leq I_o \leq 1A$	-25-125°C		0.03	0.5	mA
Output Noise Voltage	V_N	$10Hz \leq f \leq 100KHz$	25°C		42		$\mu V/V_o$
Output voltage drift	$\Delta V_o/\Delta T$	$I_o=5mA$	-25-125°C		-1.1		mV/°C
Ripple Rejection	RR	$8V \leq V_i \leq 18V, f=120Hz$	-25-125°C	62	73		dB
Dropout Voltage	V_d	$I_o=1A$	25°C		2		V
Output resistance	R_o	$f=1KHz$	25°C		10		m Ω
Short Circuit Current	I_{sc}		25°C		230		mA
Peak Current	I_{pk}		25°C		2.2		A

* Pulse test.

RATINGS AND CHARACTERISTIC CURVES

Typical Characteristics



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

