

THREE-TERMINAL POSITIVE VOLTAGE REGULATOR

FEATURES

Maximum output current

$$I_{OM} : 1.5A$$

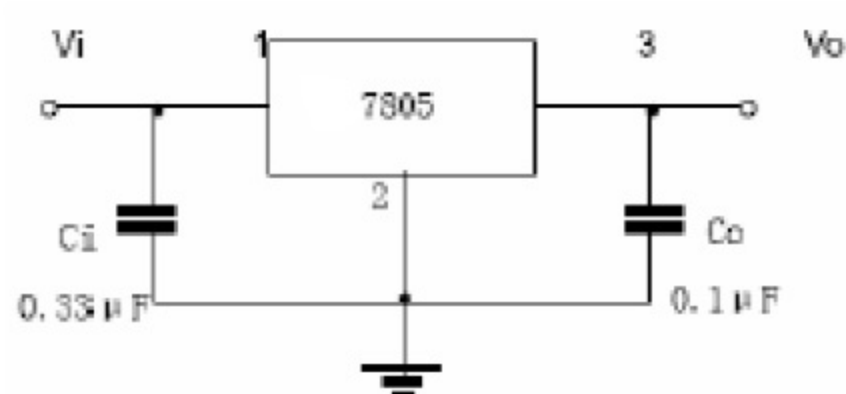
Output voltage

$$V_O : 5V$$

Continuous total dissipation

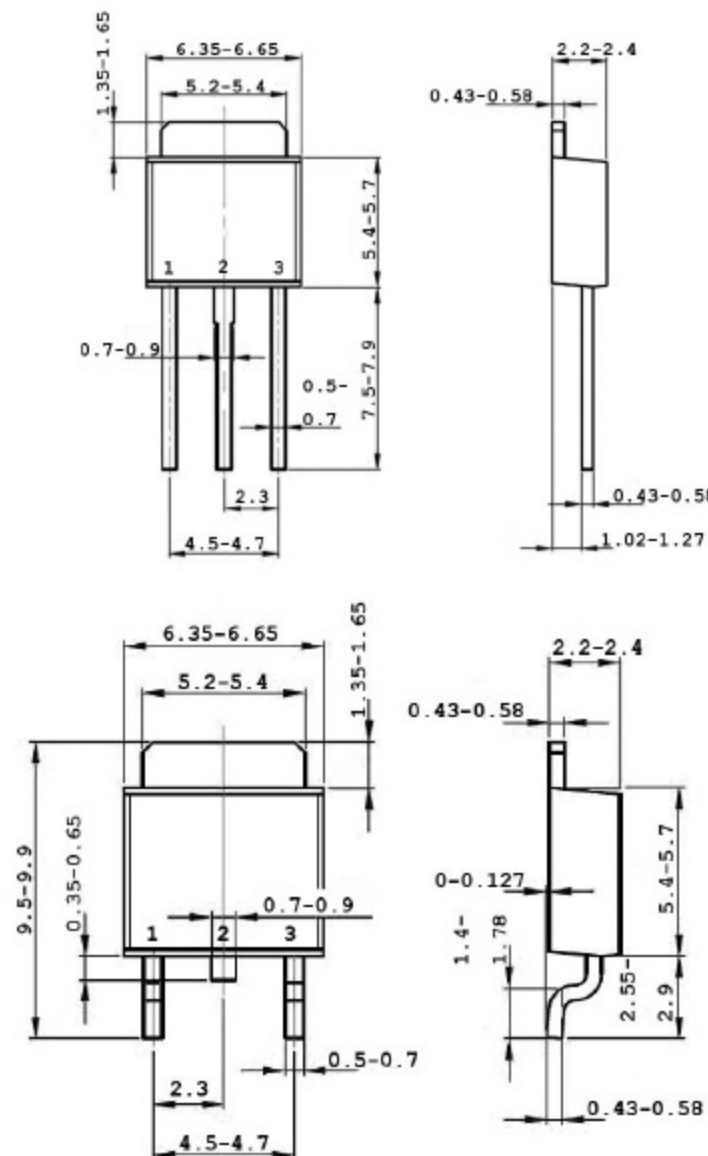
$$P_D : 1.25W$$

Typical Application



TO-251 TO-252-2L

1. IN
2. GND
3. OUT



ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

Parameters	Symbols	Value	UNITS
Input Voltage	V_I	35	V
Operating Junction Temperature Range	T_{OPR}	0~+125	°C
Storage Temperature Range	T_{STG}	-55~+150	°C

ELECTRICAL CHARACTERISTICS

($V_I=10V$, $I_O=500mA$, $0^\circ C < T_J < 125^\circ C$, $C_i=0.33\mu F$, $C_o=0.1\mu F$, unless otherwise specified)

Parameters	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Output Voltage	V_O	$T_J=25^\circ C$	4.8	5.0	5.2	V
		$7V \leq V_I \leq 20V$, $I_O=5mA-1A$, $P < 15W$	4.75	5.00	5.25	V
Load Regulation	ΔV_O	$T_J=25^\circ C$, $I_O=5mA-1.5A$		9	100	mV
		$T_J=25^\circ C$, $I_O=250mA-750mA$		4	50	mV
Line Regulation	ΔV_O	$7V \leq V_I \leq 25V$, $T_J=25^\circ C$		4	100	mV
		$8V \leq V_I \leq 12V$, $T_J=25^\circ C$		1.6	50	mV
Quiescent Current	I_q	$T_J=25^\circ C$		5	8	mA
Quiescent Current Change	ΔI_q	$7V \leq V_I \leq 25V$		0.3	1.3	mA
	ΔI_q	$5mA \leq I_O \leq 1A$		0.03	0.5	mA
Output Noise Voltage	V_N	$10Hz \leq f \leq 100KHz$		42		μV
Ripple Rejection	RR	$8V \leq V_I \leq 18V$, $f=120Hz$, $T_J=25^\circ C$	62	73		dB
Dropout Voltage	V_d	$T_J=25^\circ C$, $I_O=1A$		2		V
Short Circuit Current	I_{sc}	$V_I=35V$, $T_J=25^\circ C$		230		mA
Peak Current	I_{pk}	$T_J=25^\circ C$		2.2		A

Typical Characteristics

