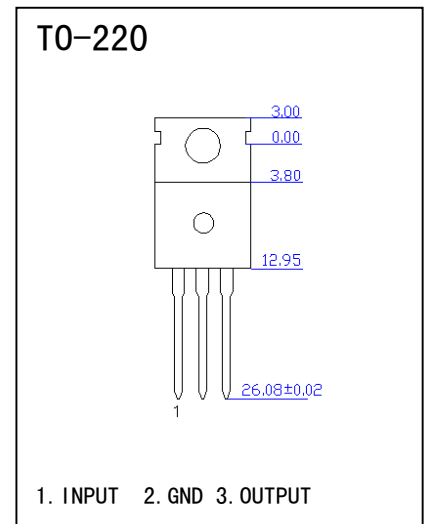


**STANDARD**

- OUTPUT CURRENT IN EXCESS OF 1A
- OUTPUT VOLTANGES OF 8V
- THERMAL OVERLOAD PROTECTION
- OUTPUT TRANSITION SOA PROTECTION
- 2% OUTTPUT VOLTAGE TOLERANCE
- GUARANTEED IN EXTENDED TEMPERATURE RANGE

△ABSOLUTE MAXIMUM RATINGS (TA=25°C)

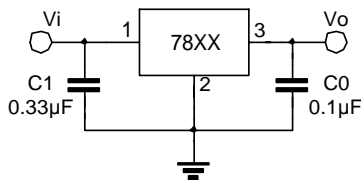
Parameter	Symbol	Typ	Unit
DC Input Voltage (Vo=5-18)	Vi	35	V
Thermal Resistance Junction-case	RoJC	5	°C/W
Thermal Resistance Junction-ambient	RoJA	65	°C/W
Operating Junction Temperature Range	ToPR	0-125	°C
Storage Temperature Range	Tstg	-65-150	°C



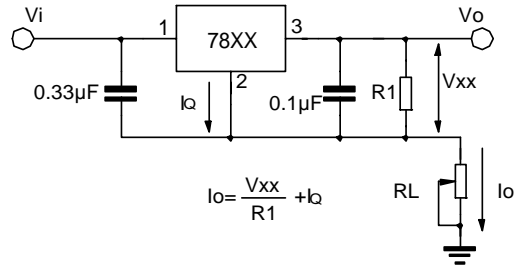
△ELECTRICAL CHARACTERISTICS (0°C ≤ Tj ≤ 125°C, Io=500mA, Vi=11V, Ci=0.33UF, Co=0.1UF)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
OUTPUT Voltage	Vo	Tj=25°C	7.7	8.0	8.3	V
		5.0mA ≤ Io ≤ 1.0A, Pd ≤ 15W, 7.5V ≤ Vd ≤ 20V	7.6	8.0	8.4	
Line Regulation	ΔVo	Tj=25°C, 8.0V ≤ Vi ≤ 25V		5.0	160	mV
		Tj=25°C, 9.0V ≤ Vi ≤ 13V		2.0	80	
Load Regulation	ΔVo	Tj=25°C, 5.0mA ≤ Io ≤ 1.5A		10	160	mV
		Tj=25°C, 250mA ≤ Io ≤ 750mA		5.0	80	
Quiescent	Iq	Tj=25°C		5.0	8	mA
Quiescent Current Change	ΔIq	5mA ≤ Io ≤ 1.0A		0.05	0.5	mA
		10.5V ≤ Vi ≤ 25V		0.5	1.0	
Output Voltage Drift	ΔVo/ΔT	Io=5mA		-0.8		mV/°C
Output Noise Votage	Vn	TA=25°C, 10Hz ≤ f ≤ 100KHz		52		uV
Supply Voltage Rejection	RR	f=120Hz, 11.5V ≤ Vi ≤ 21.5V	56	73		dB
Dropout	Vd	Io=1A, Tj=25°C		2		V
Output Resistance	Ro	f=1kHz		17		mΩ
Short Circuit Current	Isc	Vi=35V, TA=25°C		0.23		A
Short Circuit Peak Current	Ipx	Tj=25°C		2.2		A

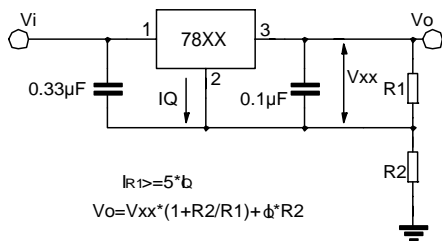
**APPLICATION CIRCUITS**



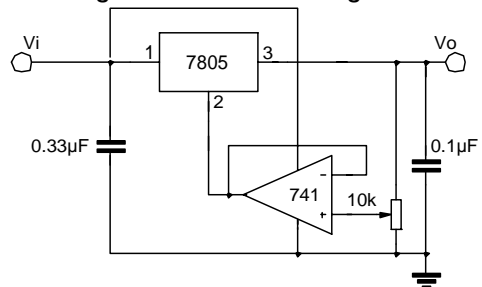
**Fig.4 Fixed output regulator**



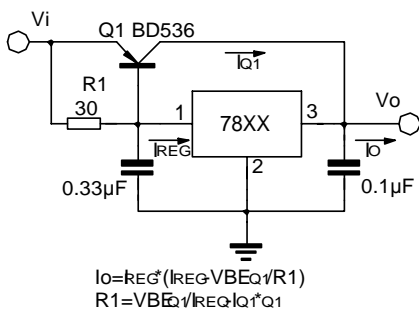
**Fig.5 Constant current regulator**



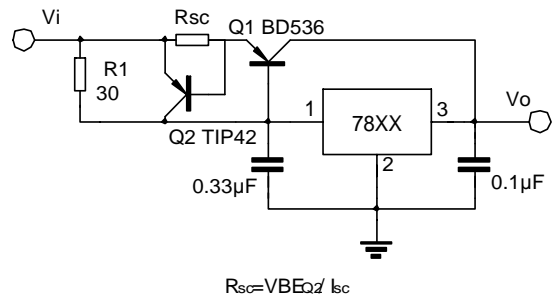
**Fig.6 Circuit for increasing Regulator output voltage**



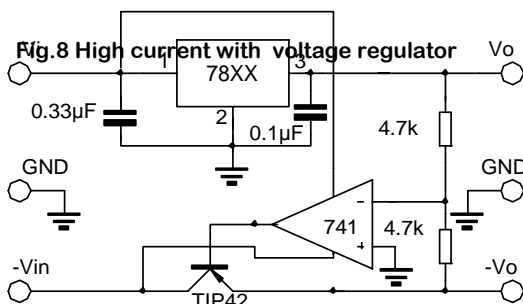
**Fig.7 Adjustable output**



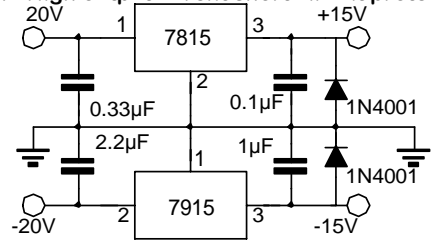
**Fig.8 High current with voltage regulator**



**Fig.9 High output current short circuit protection**



**Fig.10 Tracking voltage regulator**



**Fig.11 Split power supply (±15V, 1A)**