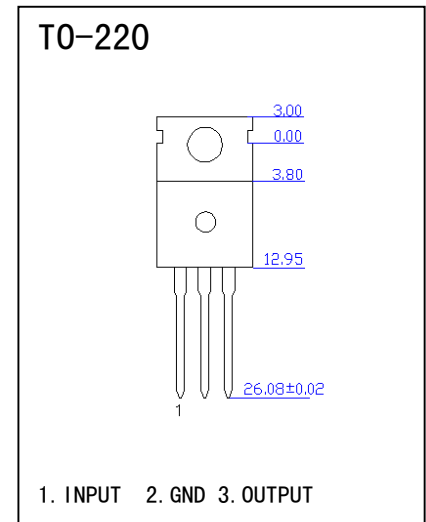


STANDARD

- OUTPUT CURRENT IN EXCESS OF 1A
- OUTPUT VOLTAGES OF 12V
- THERMAL OVERLOAD PROTECTION
- OUTPUT TRANSITION SOA PROTECTION
- 2% OUTPUT 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	11.5	12	12.5	V
		5.0mA ≤ Io ≤ 1.0A, Po ≤ 15W, 14.5V ≤ Vi ≤ 27V	11.4	12	12.6	
Line Regulation	ΔVo	Tj=25°C, 14.5V ≤ Vi ≤ 30V		10	240	mV
		Tj=25°C, 16V ≤ Vi ≤ 22V		3.0	120	
Load Regulation	ΔVo	Tj=25°C, 5.0mA ≤ Io ≤ 1.5A		11	240	mV
		Tj=25°C, 250mA ≤ Io ≤ 750mA		5.0	120	
Quiescent	Iq	Tj=25°C		5.1	8	mA
Quiescent Current Change	ΔIq	5mA ≤ Io ≤ 1.0A		0.1	0.5	mA
		14.5V ≤ Vi ≤ 25V		0.5	1.0	
Output Voltage Drift	Δ Vo/ ΔT	Io=5mA		-1		mV/ °C
Output Noise Voltage	Vn	Ta=25°C, 10Hz ≤ f ≤ 100KHz		76		uV
Supply Voltage Rejection	RR	f=120Hz, 15V ≤ Vi ≤ 25V	55	71		dB
Dropout	Vd	Io=1A, Tj=25°C		2		V
Output Resistance	Ro	f=1kHz		18		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

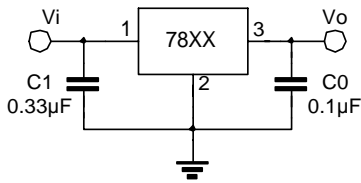


Fig.4 Fixed output regulator

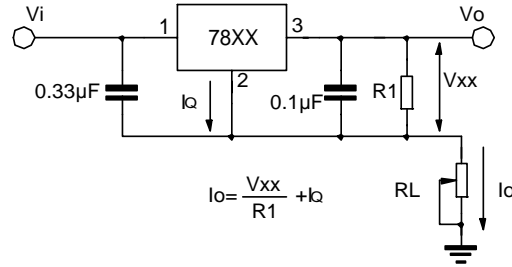


Fig.5 Constant current regulator

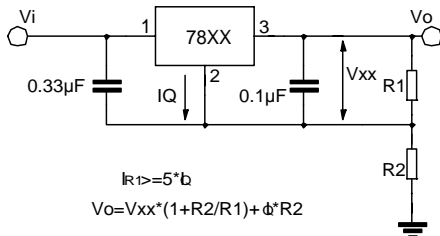


Fig.6 Circuit for increasing Regulator output voltage

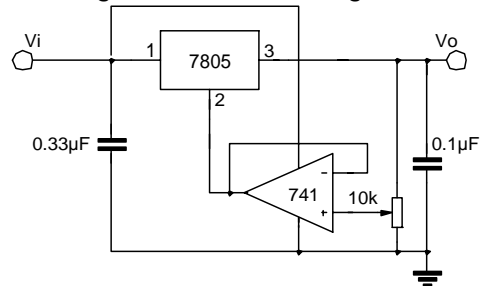


Fig.7 Adjustable output

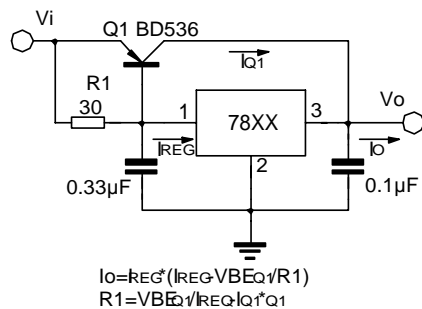


Fig.8 High current with voltage regulator

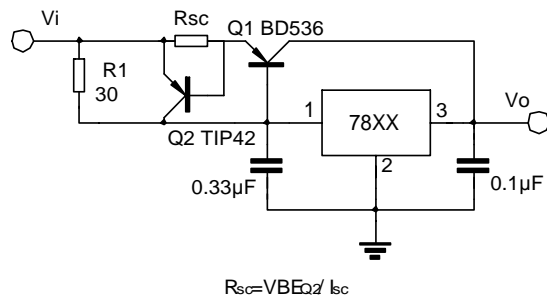


Fig.9 High output current short circuit protection

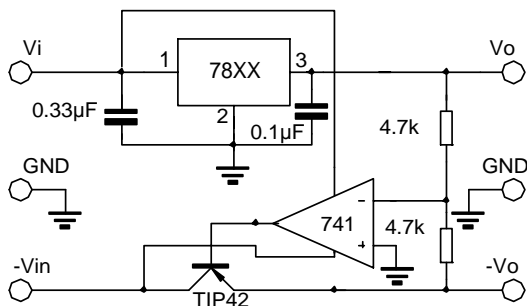


Fig.10 Tracking voltage regulator

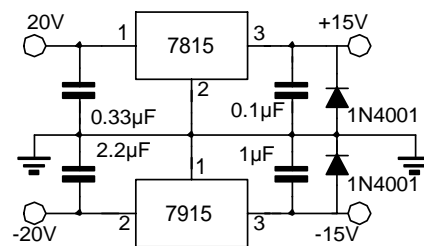


Fig.11 Split power supply(±15V, 1A)