

# Bill Of Materials for LM35\_EXT\_SCH\_VIDEO

## 13 Capacitors

Quantity	References	Value	Description
9	C1-C2, C5-C7, C10-C13	0.1u	CAP SMD1206
2	C3-C4	0.68u	CAP SMD1206
2	C8-C9	10u	Electrolytic Capacitor, Miniature, 10 µF, 25 V, ML Series, ± Radial Leaded, 4 mm

Sub-totals:

## 26 Resistors

Quantity	References	Value	Description
1	R1	3k3	Through Hole Resistor 1/10W 1%
11	R2,R4,R6-R7,R12-R13,R16-R17,R19-R20,R23	10k	Through Hole Resistor 1/10W 1%
2	R3,R5	100k	Through Hole Resistor 1/10W 1%
1	R8	3K3	Through Hole Resistor 1/10W 1% 20%,
3	R9,R18,R24	1K	Through Hole Resistor 1/10W 1%
1	R10	33K	Through Hole Resistor 1/10W 1%
1	R11	5k6	Through Hole Resistor 1/10W 1%
1	R14	5K6	RES 1/10W 1% SMD 1206
2	R15,R25	680	RES 1/10W 1% SMD 1206
1	R21	5k1	Through Hole Resistor 1/10W 1%
1	R22	5K1	Through Hole Resistor 1/10W 1%
1	R26	100	Through Hole Resistor 1/10W 1%

Sub-totals:

## 10 Integrated Circuits

Quantity	References	Value	Description
2	U1,U8	7SEGM VOLTMETER	
1	U2	LM35	Precision Centigrade Temperature Sensor (-55C to 150C)
5	U3-U7	AD822AP	Dual, Single Supply, Precision, Rail-To-Rail,Low Power, FET-Input Operational Amplifier (1.9MHz, 3V/us, 3V-36V)
1	U9	IRM-05-15S	AC/DC PCB Mount Power Supply (PSU), ITE, 1 Output, 5 W, 15 V, 330 mA
1	U10	ICL7660	Switched-Capacitor Voltage Converters.

Sub-totals:

## 2 Transistors

Quantity	References	Value	Description
1	Q1	BC857A	PNP Silicon Planar General Purpose Transistor
1	Q2	MPSA06	Silicon NPN Low Power Bipolar Transistor (625mW, 150eC)

Sub-totals:

## 8 Diodes

Quantity	References	Value	Description
4	D9-D10,D13-D14	LED-RED	LED 3MMI (Red)
1	D11	1N4740A	10V 25mA Zener Diode
1	D12	1N4001	Silicon Rectifier. Maximum Recurrent Peak Reverse Voltage 50V. Maximum Average Forward Rectified Current 1.0A
2	D1-D4,D5-D8	BAT81	Small Signal Schottky Diode, Single, 40 V, 30 mA, DO35

Sub-totals:

## 19 Miscellaneous

<u>Quantity</u>	<u>References</u>	<u>Value</u>	<u>Description</u>
1	RL1	12V	RT424012 Power Relay, DPDT, 12 VDC, 8 A, RT2 Series, Through Hole,
1	RV1	11k	Rotary Potentiometer, Carbon, 10 kohm, 1 Turns, Linear, 50 mW, ± 20%, PTV09A Series
1	RV2	47k	Rotary Potentiometer, Carbon, 50 kohm, 1 Turns, Linear, 50 mW, ± 20%, PTV09A Series
2	RV3-RV4	10k	Trimmer Potentiometer, 10 kohm, 1 Turns, Through Hole
2	SW1-SW2	TL 46P 0	Lever switch, DPDT TL series, 2x ON - ON
12	X1-X12	CONN-SIL2	MKDSN1,5/2-5,08

Sub-totals: