

Onstate Technologies			file: BOM BMAS LED display	Bill of Materials:	Bargraph Meter
www.OnstateTech.com				PCB Version: 1	Date: Aug./15
Part #:	Qty.	Value:	Description:	Note	Digikey #:
R1	1	220k	220k (100-470k) Ohm resistor, 1/8W	display decay rate	220KEBK-ND
R2	1	220k	220k Ohm resistor, 1/8W 5%	LOW adj trim	220KEBK-ND
R3	1	4.7k	4.7k Ohm resistor, 1/8W 5%	LED current limit	4.7KEBK-ND
R4	1	10k	10k Ohm resistor, 1/8W 5%	Vout divider	10KEBK-ND
R5	1	27k	27k Ohm resistor, 1/8W 5%	Vout divider	27KEBK-ND
R6	1	62k	62k Ohm resistor, 1/8W 5%	HI V divider	62KEBK-ND
R7	1	10k	10k Ohm resistor, 1/8W 5%		10KEBK-ND
R8	1	10k	10k Ohm resistor, 1/8W 5%	1st op-amp gain	10KEBK-ND
R9	1	47k	47k Ohm resistor, 1/8W 5%	1st op-amp gain	47KEBK-ND
R10	1	36k	27-47k Ohm resistor, 1/8W 5%	Sallen-Key filter, in	
R11	1	10k	4.7-15k Ohm resistor, 1/8W 5%	Sallen-Key filter, fb	
R12	1	27k	27k Ohm resistor, 1/8W 5%	Sallen-Key filter, f trim	27KEBK-ND
R13	1	10k	10k Ohm resistor, 1/8W 5%	Sallen-Key filter, gain	10KEBK-ND
R14	1	4.7k	4.7k Ohm resistor, 1/8W 5%		
VR1	1	100k	100k trimmer (100k resistor when using main input pot)		100KEBK-ND
			100k R on VR1 pins 1/3, wire jumper on pins 1/2		
		A1K	1k audio potentiometer, panel mount	main, all BMAS in adj.	A1K
VR2	1	20k	20k trimmer R, top adjust	LOW adj	3362P-203LF-ND
VR3	1	20k	20k trimmer R, top adjust	LED current adj	3362P-203LF-ND
VR4	1	20k	20k trimmer R, top adjust	Sallen-Key filter, gain	3362P-203LF-ND
VR4	1	20k	20k trimmer R, top adjust	Sallen-Key filter, freq	3362P-203LF-ND
D1	1	1N4148	diode, 200mA/1A, generic		1N4148
D2				NA	
D3	1	1N4148	diode, 200mA/1A, generic		1N4148
D4	1	6.2V	6.2V zener diode, 200mA		1N5234B
C1	1	224	0.22uF (224) mono, cer	use 104 for >350Hz in	
C2	1	105	1.0uF (105) mono, 16-50V 0.1"	optional	445-8410-ND
C3	1	105	1.0uF (105) mono, 16-50V 0.1"	0.1" for basic meter (VR1 in)	478-4864-ND
C4				0.2" to R1 for IC2 amp use	see schematic
C5	1	225	1.0-22uF, 16-50V cap.	small filter cap	FK18X5R1C225K
C6	1	224	0.22uF (224) mono, cer		
C7	1	223	cer. mono, 16-50V 0.1"	Sallen-Key filter, cap	1kHz
C8	1		cer. mono, 16-50V 0.1"	Sallen-Key filter, cap	C=C7+C8
C9	1	472	cer. mono, 16-50V 0.1"	Sallen-Key filter, cap	1kHz
C10	1		cer. mono, 16-50V 0.1"	Sallen-Key filter, cap	C=C9+C10
IC1	1	LM3915N	10 seg. bargraph driver, VU, 16-DIP		LM3915N-1/NOBP
IC2	1	LM258	dual op-amp, 8-DIP	LM258/LM358	LM258
LED	1	LED	5mm LEDs	various	
H1/2	1	3-PIN	3 pin locking header, RA, 0.1"	align flat, bend H2 pin	A19480-ND
			3-pin RA header, bare	align flat, bend H2 pin	
CRIMP	3	CRIMP	0.1" crimp pins	hand crimp	A19520-ND
CON3	1	3-CON	3 pin locking housing, 0.1"		A19491-ND
PCB	1	PCB-BMAS	LED Bargraph meter, op-amp, audio spectrum bandpass		
knob	1	knob	Knob, dial W/line, black, 0.25" shaft	knob, various	450-1738-ND
SW1	1	SPST 0-1	SPST power switch		
DC JACK	1	DC JACK	2.1mm DC power jack, panel mount		
RCA	1	RCA-F	Female RCA audio in, panel mount		
#2 spacers		#2 spacers	3/8" standoff spacers.		