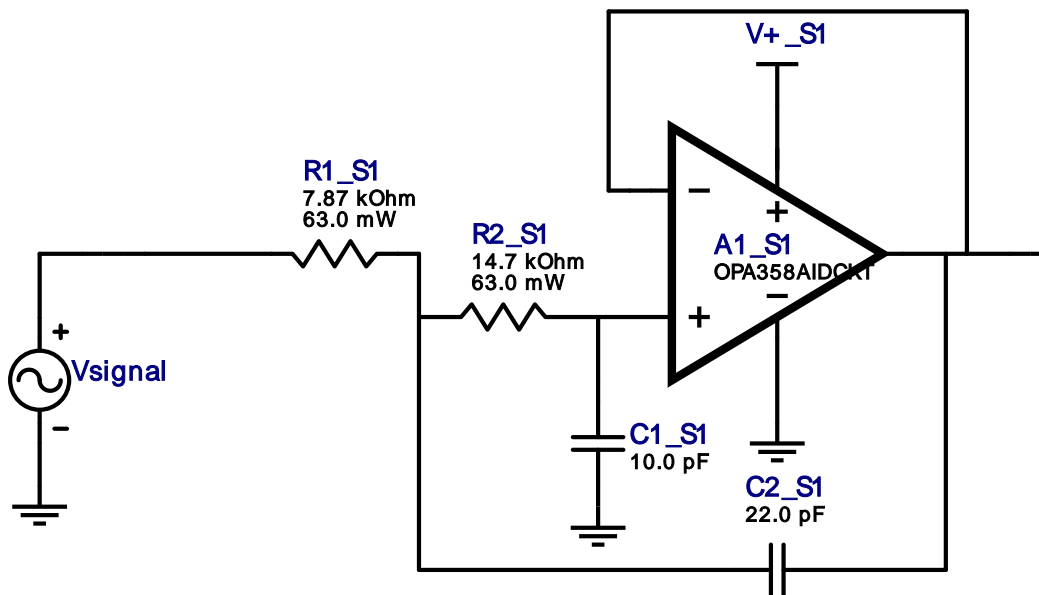
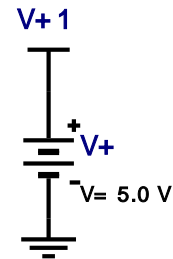


WEBENCH[®] Design Report

 Design : 4408140/9 OPA358AIDCKT
 Lowpass, Sallen Key, Butterworth

Electrical BOM

#	Name	Manufacturer	Part Number	Properties	Qty	Price	Footprint
1.	A1_S1	Texas Instruments	OPA358AIDCKT	GbwTyp= 80.0 MHz VccMin= 2.7 V VccMax= 5.5 V	1	\$0.55	SC-70 0 mm ²
2.	C1_S1	Kemet	C0402C100J3GACTU Series= C0G/NP0	Cap= 10.0 pF VDC= 25.0 V Tolerance= 5.0 %	1	\$0.01	0402 3 mm ²
3.	C2_S1	Kemet	C0402C220J4GACTU Series= C0G/NP0	Cap= 22.0 pF VDC= 16.0 V Tolerance= 5.0 %	1	\$0.01	0402 3 mm ²

#	Name	Manufacturer	Part Number	Properties	Qty	Price	Footprint
4.	R1_S1	Vishay-Dale	CRCW04027K87FKED Series= CRCW..e3	Res= 7.87 kOhm Power= 63.0 mW Tolerance= 1.0%	1	\$0.01	0402 3 mm ²
5.	R2_S1	Vishay-Dale	CRCW040214K7FKED Series= CRCW..e3	Res= 14.7 kOhm Power= 63.0 mW Tolerance= 1.0%	1	\$0.01	0402 3 mm ²

Design Inputs

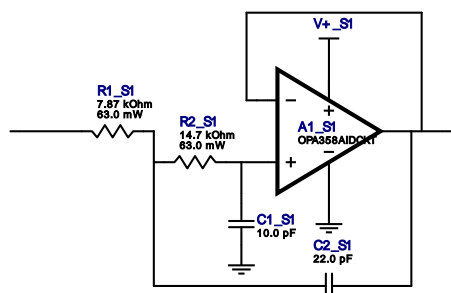
#	Name	Value	Description
1.	FilterType	Lowpass	
2.	FilterResponse	Butterworth	
3.	FilterOrder	2.0	
4.	FilterTopology	Sallen_Key	
5.	NumberOfStages	1.0	
6.	PassbandFrequency	1000.0 k	
7.	StopbandAttenuation	-45.0	
8.	StopbandFrequency	100.0	
9.	Gain	1.0	
10.	SingleSupply	5.0	Power supply(s) to active chips
11.	ResistorTolerance	E96	Resistor series - 1% Passive resistor tolerance
12.	CapacitorTolerance	E24	Capacitor series - 5% Passive capacitance tolerance
13.	SeedCapacitance	10.0 p	Seed Capacitance to start design of filter

Design Assistance

1. **OPA358AIDCKT** Product Folder : <http://www.ti.com/product/OPA358> : contains the data sheet and other resources.

Filter Stage :1

Cutoff Frequency	1000.0 kHz
Min GBW Req'd	71.0 MHz
Stage Gain	1.0 V/V
Stage Q	710.0 m
Stage Topology	Sallen_Key



Electrical BOM

#	Name	Manufacturer	Part Number	Properties	Qty	Price	Footprint
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3.	C2_S1	Kemet	C0402C220J4GACTU Series= C0G/NP0	Cap= 22.0 pF VDC= 16.0 V Tolerance= 5.0 %	1	\$0.01	0402 3 mm ²
4.	R1_S1	Vishay-Dale	CRCW04027K87FKED Series= CRCW..e3	Res= 7.87 kOhm Power= 63.0 mW Tolerance= 1.0%	1	\$0.01	0402 3 mm ²
5.	R2_S1	Vishay-Dale	CRCW040214K7FKED Series= CRCW..e3	Res= 14.7 kOhm Power= 63.0 mW Tolerance= 1.0%	1	\$0.01	0402 3 mm ²

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