

VFET Supplemental Parts Kit for Printed Circuit Board (PCB)

Does not include VFETS, or insulators & hardware for VFETs & large MOSFETs, (MOSFETs are included) PCBs, or Brackets and Bolts for mounting PCBs to heatsinks

For these and additional items get the VFET Essentials Parts Kit also

| KIT PART # | # per kit | Kit Part Description | Vendor | Vendor Part Number | Vendor Description | Manufacturer | Manufac. Part # | Minimum Order \$ Ea. Digi-Key | Minimum Order \$/Kit Digi-Key |
|---------------------------|--------------|------------------------------|---------|-----------------------|---|------------------|-----------------------------|-------------------------------------|-------------------------------------|
| Q3 | 2 | Transistor | DigiKey | ZTX450-ND | TRANSIS. NPN 45V 1000MA TO92-3 | DIODES INC. | ZTX450 | 0.61 | 1.22 |
| Q4 | 2 | Transistor | DigiKey | ZTX550-ND | TRANSIS. PNP 45V 1A E-LINE | DIODES INC. | ZTX550 | 0.61 | 1.22 |
| Q7 | 2 | N ch MOSFET | DigiKey | IRFP240PBF-ND | MOSFET N-CH 200V 20A TO-247AC | VISHAY SILICONIX | IRFP240PBF | 2.09 | 4.18 |
| Q8 | 2 | P ch MOSFET | DigiKey | IRFP9240PBF-ND | MOSFET P-CH 200V 20A TO-247AC | VISHAY SILICONIX | IRFP9240PBF | 2.54 | 5.08 |
| Q6 | 2 | N Ch MOSFET | DigiKey | FQP3N30-ND | MOSFET N-CH 300V 1.95A TO-220F | Fairchild | FQP3N30 | 0.83 | 1.66 |
| Q5 | 2 | P Ch MOSFET | DigiKey | FQP3P20-ND | MOSFET P-CH 200V 2.8A TO-220 | Fairchild | FQP3P20 | 0.85 | 1.7 |
| Q11,12,13,14 | 8 | Voltage Reference | DigiKey | 296-1287-1-ND | Shunt Voltage Reference IC | Texas Inst. | TL431ACLPR | 0.4 | 3.2 |
| | 4 | Diode | DigiKey | 1N4004FSCT-ND | Diode Standard 400V 1A | Fairchild | 1N4004 | 0.17 | 0.68 |
| R32 | 2 | Resistor-0.10 | DigiKey | PPC3W.10CT-ND | RES 0.1 OHM 3W 5% AXIAL | VISHAY BC | AC03000001007JAC00 | 0.62 | 1.24 |
| R29,30 | 4 | Resistor-10 | DigiKey | CMF10.0HFCT-ND | RES 10.0 OHM 1/2W 1% AXIAL | VISHAY DALE (VA) | CMF5510R000FHCB | 0.61 | 2.44 |
| R5,6 | 4 | Resistor-47.5 | DigiKey | CMF47.5HFCT-ND | RES 47.5 OHM 1/2W 1% AXIAL | VISHAY DALE (VA) | CMF5547R500FHCB | 0.61 | 2.44 |
| R25,26,34,35 | 8 | Resistor-221 | DigiKey | CMF221HFCT-ND | RES 221 OHM 1/2W 1% AXIAL | VISHAY DALE (VA) | CMF55221R00FHCB | 0.61 | 4.88 |
| R4 | 2 | Resistor-332 | DigiKey | CMF332HFCT-ND | RES 332 OHM 1/2W 1% AXIAL | VISHAY DALE (VA) | CMF55332R00FHCB | 0.61 | 1.22 |
| R27,28 | 4 | Resistor-1.00K | DigiKey | CMF1.00KHCT-ND | RES 1.00K OHM 1% 50PPM 1/2W | VISHAY DALE (VA) | CMF551K0000FHCB | 0.48 | 1.92 |
| R1,3,7,8,9,10,13,14,19,20 | 20 | Resistor-2.21K | DigiKey | CMF2.21KHCT-ND | RES 2.21K OHM 1/2W 1% AXIAL | VISHAY DALE (VA) | CMF552k2100FHCB | 0.61 | 12.2 |
| R17,18 | 4 | Resistor-4.75K | DigiKey | CMF4.75KHCT-ND | RES 4.75K OHM 1/2W 1% AXIAL | VISHAY DALE (VA) | CMF554K7500FHCB | 0.61 | 2.44 |
| R11,12,21,22,31 | 10 | Resistor-10K | DigiKey | CMF10KHCT-ND | RES 10K OHM 1/2W .5% AXIAL | VISHAY DALE (VA) | CMF5510K000DHR6 | 0.72 | 7.2 |
| R33 | 4 | Resistor-22.1K | DigiKey | CMF22.1KHCT-ND | RES 22.1K OHM 1/2W 1% AXIAL | VISHAY DALE (VA) | CMF5522K100FHCB | 0.61 | 2.44 |
| R15,16 | 4 | Resistor-41.2K | DigiKey | CMF41.2KHCT-ND | RES 41.2K OHM 1/2W 1% AXIAL | VISHAY DALE (VA) | CMF5541K200FHCB | 0.61 | 2.44 |
| R2,23,24 | 6 | Resistor-47.5K | DigiKey | CMF47.5KHCT-ND | RES 47.5K OHM 1/2W 1% AXIAL | VISHAY DALE (VA) | CMF5547K500FHCB | 0.61 | 3.66 |
| C1,2,7,8 | 8 | Capacitor 220uF | DigiKey | 604-1066-ND | 220uF 35V Silmic 2 Aluminum Capacitors | ELNA | RFS-35V221M6#5 | 1.33 | 10.64 |
| C3,4,5,6 | 8 | Capacitor 47uF | DigiKey | 604-1064-ND | 47uF 35V Silmic 2 Aluminum Capacitors | ELNA | RFS-35V470MH3#5 | 0.667 | 5.336 |
| P1,P2 | 4 | Trimmer Pot-5K | DigiKey | 3386P-502LF-ND | TRIMMER 5K OHM 0.5W TH | BOURNS INC | 3386P-1-502 | 1.6 | 6.4 |
| P3,P4 | 4 | Trimmer Pot- 500 | DigiKey | 3386P-501LF-ND | 500 Ohm 0.5W, 1/2W PC Pins | BOURNS INC | 3386P-1-501LF | 1.6 | 6.4 |
| LED | 4 | LED | DigiKey | C503B-BCN-CV0Z0461-ND | Blue 470nm LED Indication - 3.2V Radial | Cree | C503B-BCN-CV0Z0461 | 0.21 | 0.84 |
| LED Bezel | 2 | LED Bezel | DigiKey | 67-1332-ND | Holder LED Panel 5MM Black Nylon | LUMEX | SSH-LX5091 | 0.29 | 0.58 |
| Heatsink | 4 | Aavid Heatsink | DigiKey | HS193-ND | HEATSINK TO-220 1.45" HIGH | Aavid | 551002B00000G | 0.64 | 2.56 |
| Htsink Hardware | 4 | Htsink Hardware | DigiKey | 4880MG-ND | Mounting Kit | Aavid | 4880MG | 2.24 | 8.96 |
| Mica Insulator | 4 | Mica Insulator | DigiKey | 56-77-11G-ND | Thermal Pad | Aavid | 56-77-11G | 0.18 | 0.72 |
| | 4 | 3x5 bags | Uline | S-1707 | 3x5 Reclosable bags | Uline | S-1707 | | |
| | 2 | 3x5 anti stat Bag | Uline | S-2506 | 3x5 Reclosable Static Sheilding Bags | Uline | S-2506 | | |
| | 1 | Mailer 7x4x1 | Uline | S-16524 | Indestructo Mailer | Uline | S-16524 | | |
| Q1,2 | 1 | 2 Matched prs.JFETs diyAudio | LSJFET1 | | 2 Matched Pairs JFETs: J74B, LSK170B | LINEAR Systems | TOTAL: From Digi-Key | | 105.90 |
| | | | | | | | Total for JFETs | | 49.00 |
| | | | | | | | TOTAL if not ordered in kit | | 154.90 |