

JTK-VSSA Bill Of Materials

Resistors

All resistors will be 1/4W 5% tolerance or better metal film (MF) or carbon film (CF) unless otherwise specified that will fit 10mm (0.400") lead spacing (LS).

R1 - 100K

R2 - 10K

R3, R13, R14, R16, R19 - 10R

R4 - 1K6

R5, R6 - 390R

R8, R9 - 2K2, 1% or better MF

R7, R10 - 100R, 1% or better MF

R11, R12 - 22K

R15 - 2K2

R17, R18 - 100R

R20, R21 - 20R, 1/2W or better that will fit 12.5mm (0.500") LS

VR1, VR3 - 500R, Bourns 3296W series or similar precision trimmer

VR2 - 5K, Bourns 3296W series or similar precision trimmer

Capacitors

C1 - 10uF, $\geq 50V$, 22.5mm (0.900") LS, Film or Non-Polarized Electrolytic

C2 - 470pF, $\geq 50V$, 5mm (0.200") LS, C0G / NP0 Ceramic or Film

C3 - 10uF, $\geq 16V$, 5mm (0.200") LS, $\leq 7.5mm$ (0.300") \varnothing

C4, C5 - 2200uF, $\geq 6.3V$, 5mm (0.200") LS, 12.5mm (0.500") \varnothing , Aluminum Electrolytic

C6, C8, C11, C13 - 1uF, $\geq 50V$, 5mm (0.200") LS, Film or XR7 Ceramic

C7, C9, C10, C12 - 1000uF, $\geq 50V$, 5mm (0.200") LS @ 12.5mm (0.500") \varnothing or 7.5mm (0.300") LS @ 16mm (0.650") \varnothing ,

Aluminum Electrolytic

C14, C15 - 47nF, $\geq 50V$, 5mm (0.200") LS, Film or XR7 Ceramic

COMP1, COMP2 - 22pF, $\geq 100V$, 5mm (0.200") LS, Silver Mica or C0G / NP0 Ceramic

Diodes

D1, D2, D3, D4 - 1N4007 or similar, $\geq 1A$, $\geq 100V$, rectifier or diode

Transistors

Q1, Q5 - KSC1845F or similar ECB pinout TO-92 device

Q2, Q4 - KSA992F or similar ECB pinout TO-92 device

Q3 - BC560C or similar CBE pinout TO-92 device

Q6, Q8 - BC550C or similar CBE pinout TO-92 device

Q7 - KSA1220A or similar ECB pinout TO-126 device

Q9 - KSC2690A or similar ECB pinout TO-126 device

M1 - 2SK1056 or similar GSD pinout TO-247 device

M2 - 2SJ162 or similar GSD pinout TO-247 device

Please Note: The output devices, M1 and M2, must be lateral type MOSFET devices!