

50W amp from QST magazine NOTE: NO relay switching					
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25th June 2010	Bill Of Material, draft only	vk3pe			
	1206-0805 means either size SMD part should fit axial 0.6 etc is the hole spacing on pcb for part.		0805 sized is preferred		
Part Type	Part type	Designator	Footprint	Description	Notes
8T:5T FT37-43	* see note 1 below	T2	BN-1		FT37-43 toroid
100uF/16v 25v	cap with lead spacing 0.1"	C17	rb.1/.2	polarized cap	vertical mount electro
10uF/16v 25V	cap with lead spacing 0.1"	C2	RB.1/.2	polarized cap	vertical mount electro
1t:3t BN-43-3312	inductor	T1	BN-2		hand wound
6 HOLE CHOKES	inductor	L1	6-HOLE	Inductor	possibly use 2-3T on a BN43-2402 core ?
1N4148	diode	D4	AXIAL0.4		fit over the FET's and fasten, see article, use heatsink compound
1N4148	diode	D3	AXIAL0.4		fit over the FET's and fasten, see article, use heatsink compound
1N4148	diode	D2	AXIAL0.4		fit over the FET's and fasten, see article, use heatsink compound
1N4148	diode	D1	AXIAL0.4		fit over the FET's and fasten, see article, use heatsink compound
IRFZ24N	Farnell 8650160	Q3	TO-220	FET	Farnell 8650160 \$3.00 + GST
IRFZ24N	Farnell 8650160	Q4	TO-220	FET	Farnell 8650160 \$3.00 + GST
470R	resistor	VR1	TRIM-BOURNS	Trim Pot.	use 500R
470R	resistor	VR2	TRIM-BOURNS	Trim Pot.	use 500R
22R	resistor	R8	1206-0805	1W axial	axial part 1 watt
22R	resistor	R6	1206-0805	1W axial	axial part 1 watt
68R	resistor	R16	axial0.6	1W axial	1 watt
68R	resistor	R12	axial0.6	1W axial	1 watt
150R	resistor	R14	axial0.6	1W axial	1 watt
18R	resistor	R7	1206-0805		axial part 1 watt
18R	resistor	R9	1206-0805		axial part 1 watt
270R see note	resistor	R2	AXIAL0.6	1W axial	100R fitted
270R see note	resistor	R1	AXIAL0.6	1W axial	NOT fitted
330R	resistor	R15	axial0.6	1W axial	1 watt (2w better)
330R	resistor	R13	axial0.6	1W axial	1 watt (2w better)
560R x2	resistor			1W axial	alternate 3dB input pad
33R	resistor			1W axial	alternate 3dB input pad
270R	resistor			1W axial	alternate 3dB input pad 2W better

1k2	resistor	R5	1206-0805				
1k2	resistor	R4	1206-0805				
1K8	resistor	R3	1206-0805				
470R	resistor	R10	1206-0805				
470R	resistor	R11	1206-0805				
100nF XR7	smd cap	C3	1206-0805	Capacitor			
100nF XR7	smd cap	C12	1206-0805	Capacitor			
100nF XR7	smd cap	C4	1206-0805	Capacitor			
100nF XR7	smd cap	C9	1206-0805	Capacitor			
100nF XR7	smd cap	C8	1206-0805	Capacitor			
100nF XR7	smd cap	C15	1206-0805	Capacitor			
100nF XR7	smd cap	C1	1206-0805	Capacitor			
100nF XR7	smd cap	C16	1206-0805	Capacitor			
100nF XR7	smd cap	C13	1206-0805	Capacitor			
100nF XR7	smd cap	C14	1206-0805	Capacitor			
100nF XR7	smd cap	C5	0805	Capacitor	1206 will just fit		
100nF XR7	smd cap	C11	0805	Capacitor	1206 will just fit		
100nF XR7	smd cap	C10	0805	Capacitor	1206 will just fit		
1nF XR7	smd cap	C6	1206-0805	Capacitor			
1nF XR7	smd cap	C7	1206-0805	Capacitor			
2N3906	transistor	Q2	TO-92				
2N3906	transistor	Q1	TO-92				
5V6 400mW	Zener diode 5.6v	ZD1	axial Zener				
	alternate parts can be used, see web page vk3pe						
PCB by vk3pe							
insulator kits for FET's.							
Nuts, bolts etc as required							
heatsink							
NOTES:-							
1.	a better match is to use a BN43-2402 balun core 3turns :2 turns, 2 turns on input side.						
	Refer to www.carnut.info web pages, link for this amp.						