

PN2222 Rxloop Parts List for antenna + splitter (coax version) Copyright pa0nhc

20200111 PCB versions 20200104, Ver 20210905.

Conrad orderNrs only given for your convenience. Check "www.mouser.com" also for availability.
When ordering a larger order at mouser.com, shipment is free and cost per part can be much lower.
See Conrad also for parts technical details.

REM:

For easy assembling, install components in the order of appearance in the list below.

For ordering, summarize equal components in amplifier And splitter.

PCB's	Version 20200104	www.pa0nhc.nl "Available PCBs"	
D1,2,3,4,5,6,7,8	1N4148	FAST switching diode	Conrad 1581846
L1,2	0.33 uH (330nH)	OR close wind 5 turns SWG22 (0.71mm) with 10mm internal diameter. Solder it with 10mm distance between coil and PCB.	Conrad 1405942
L3	33 uH	(Idc >= 150 mA)	Conrad 1405998
L4	20t lacquered wire 0.5mm.	Core ½ " dia => mix #31<= FairRite 26 31 480 102	mouser.com
R1,2	51	(or 100 // 100)	
R4,10	180		
R5,13	*20*	(or 22 // 220)	Conrad 1583647
R6,15	100		
R7,8	12		
R9,18,21,22	220		
R11,20	4k7		
R12,19	*1k3*	(or 1k5 // 12k)	Conrad 1583901
C9	10n	Ceramic RM 2.5	Conrad 453064
C7,8, 13	100n	Ceramic RM 2.5	Conrad 458211
C5,10	See construction details	Ceramic RM 2.5.	
C1,4,6	33u Tantalum		
C3,11	3u3 Tantalum		
C14	0.47u 25V.	Ceramic RM 5	Conrad 453374
C15	47u / 16V low ESR.	RM2/3. ESR= 0.1 to 1.0 Ohm.	Conrad 442648
C16	470y 16V		
C17 (C32)	470n	FILM. RM5.	1569724
"VR1"	LM2940SX-10 or LM2940SX-10/NOPB	Low drop. TO-263-3	mouser.com aliexpress
Q1,2,3,4	PN2222A	Both Q1,2 paired. Q3,4 paired. Order at least 10 pieces to be able to select pairs with equal hfe.	Mouser.com Conrad 1265001
Tr1	8+8+4 turns turns, Lacquered wire 0.25mm	Mix 61 multi aperture core : FairRite 28 61 00 68 02 See construction details.	mouser.com
CMC1	20t bifilair lacquered wire 0.23mm. Twisted 2 full turns every cm	Core ½ " dia => mix #31<= FairRite 26 31 480 102 See construction details.	mouser.com
N1,2,3	N-type female water tight panel mount .		Aliexpress
Aluminum IP65 box	Raychem RJ11	122x120x81mm	Autommation24.com

SCREENED Loop		See construction details.	
L30	100uH	(Idc >= 150 mA)	Conrad 1572836
Z30	ZPD18V 500mW		Conrad 1581906
C30	10u Tantalum 35V wired RM2.5/5		Conrad 447034
C31	100n	Cer. Rm2.5	Conrad 458211
C32	470n	FILM	
R30	3k9		
LED30	5mm RM2.5		Conrad 1603121
L31,32	20t lacquered wire 0.5mm.	Core ½ " dia => mix #31 <= FairRite 26 31 480 102 See construction details.	mouser.com
Tr30	12 turns pri. + 12 turns sec, Lacquered wire 0.25mm	Mix 61 multi aperture core : FairRite 28 61 00 68 02 See construction details.	mouser.com
F1	Fuse holder	5x20 mm (see PCB) or wire connected bulk head type.	Conrad 532908 fits this PCB.
	Fuse	5x20 mm 200 mA slow	Conrad 1576642
Antenna, 50Zout, 12-16Vdc	BNC female panel mount.	Screw it <i>in contact with the ALU</i> outside of the metal box.	Conrad 1564888
Aluminum IP65 box	Raychem RJ05	85x70x57mm	Automation24.com
Ferrite clamps. for coax cable.	Cable clamp 18 mm hole.	"Snap it" core => mix #31 <= FairRite 04 31 17 64 51 See construction details.	mouser.com
Enamelled coil wire			RF-microwave.com