Q17 Power Transistors Selection Table

Pair of transistors for the driver stage.

Minimum Vds =	150V	. same V	gs(th) range (4)	/)				Pa	air of transisto	ors tor	the unver	stage.							Q7 v1.3.4
Minimum Vds = 150V, same Vgs(th) range (4V) Minimum default config											Caculated (RCiss filter)				Final resistor values				<u></u>
DEFAULT		Status	Parts	Gfs Sie	Ciss pF	R7	R8		Freq MHz		R7	R8	Freq MHz		R7	R8	Freq MHz	OK	Comment
Q5	Р	EOL	FQP3P20	1.23	190	10)		8,38		104,7		8		100		8	Yes	0.1.1.1
Q6	Ν	EOL	FQP3N30	1.75	75			100	21,22			265,25	8			27	8	Yes	Original config
			1						ı								1		1
LIVE	_	Status	Parts		Ciss pF	R7	R8		Freq MHz		R7	R8	Freq MHz		R7	R8	Freq MHz	OK	Comment
Q5	P		FQPF7P20	3.5	590	10	_		2,70		122,61		2,2		120	ļ	2,2	Yes	Small oscillation
Q6	N	EOL	2SK3564	2.6	700			100	2,27			103,34	2,2			10	0 2,2	Yes	at clip (Q6).
TESTED		Status	Parts	Gfc Sio	Ciss pF	R7	R8		Freq MHz		R7	R8	Freq MHz	1	R7	R8	Freq MHz	ОК	Comment
Q5	Р	Status	FQPF7P20	3.5	590	10			2,70		99,9	No	2,7		100	No	2,7	Yes	overshoot with
Q6	N		FQPF3N80C	3.3	543	10		100	2,93		33,3	108,55	2,7		100	11		Yes	IXTH48P20P
40			. 4		5 10	1	1	100	2,33		l	100,00					2).		D. (111101 201
NOT TESTED		Status	Parts	Gfs Sie	Ciss pF	R7	R8		Freq MHz		R7	R8	Freq MHz		R7	R8	Freq MHz	ОК	Comment
Q5	Р		IRF9610	0.9	170	10)		9,36		104,02		9		100		9		
Q6	N		IRF610	0.8	140			100	11,36			126,31	9			12	9		
Pair of transistors for the output stage. Minimum Vds = 150V, same Vgs(th) range (4V)																			
	150V				I		1		1							1	1_		1-
DEFAULT	H	Status			Ciss pF	R14	R15		Freq KHz		R14	R15	Freq KHz		R14	R15	Freq KHz	OK	Comment
Q15	N		FQA46N15	36	2500	330	_	220	192,92	-	335,06	220.62	190	-	340		190	Yes	Original config
Q16	Р	n.a	FQA36P15	19.5	2550	1	1	330	189,13	-	-	328,49	190	l	l	33	190	Yes	
LIVE		Status	Parts	Gfs Sie	Ciss pF	R14	R15		Eron VIII-	-	R14	R15	Freq KHz	ι	R14	R15	Freg KHz	ОК	Comment
Q15	N	Status	FQA46N15	36	2500	330			Freq KHz 192,92		335,06	W12	190		330		190	Yes	Overshoot left
Q16	P		IXTH48P20P	32	5400	331		330	89,31		333,00	155,12			330	15		Yes	with new values
QIO	<u> </u>		17(11)-10(20)	32	3400	1		330	05,51			155,12	150	l	l	13	130	103	With new values
TO TEST		Status	Parts	Gfs Sie	Ciss pF	R14	R15		Freq KHz		R14	R15	Freq KHz		R14	R15	Freq KHz	ОК	Comment
Q15	N	- Ctutus	FQA46N15	36	2500	330			192,92		335,06	1125	190		330		190		-
Q16	Р	n.a	IXTQ36P15P	19	3100			330				270,21				27			Mouser 31/7
TO TEST		Status	Parts	Gfs Sie	Ciss pF	R14	R15		Freq KHz		R14	R15	Freq KHz		R14	R15	Freq KHz	ОК	Comment
Q15	Ν		IXTQ50N20P	23	2720	330)		177,31		307,96		190		300		190		
Q16	Р	n.a	IXTQ36P15P	19	3100			330	155,57			270,21	190			27	190		Mouser 31/7
_							,												1
ON TEST		Status	Parts		Ciss pF	R14	R15		Freq KHz		R14	R15	Freq KHz		R14	R15	Freq KHz	OK	Comment
Q15	N		FQA46N15	36	2500	33			192,92		335,06		190		330		190		Good but
Q16	Р		IXTQ52P10P	20	2845			330	169,52	-		294,43	190			30	190		48v max
ON TEST	1 1	Status	Darte	Gfs Sie	Ciss pF	R14	R15		Freq KHz	-	R14	R15	Freq KHz	1	R14	R15	Freq KHz	ОК	Comment
Q15	N	Status	IXTQ50N20P	23	2720	330	_		177,31		307,96	KIJ	190		300		190	OK	Good but
Q16	P		IXTQ52P10P	20	2845	33		330	169,52		307,30	294,43			300	30			48v max
QIO			IXTQ321 101	20	2043			330	105,52			254,45	150	l	l	30	130		40V IIIux
NOT TESTED		Status	Parts	Gfs Sie	Ciss pF	R14	R15		Freq KHz		R14	R15	Freq KHz		R14	R15	Freq KHz	ОК	Comment
Q15	N		IXFH50N85X	32	4480	330)		107,65		186,97		190		190		190		
Q16	Р		IXTH48P20P	32	5400			330				155,12	190			15	190		
NOT TESTED	Щ	Status			Ciss pF	R14	R15		Freq KHz		R14	R15	Freq KHz		R14	R15	Freq KHz	OK	Comment
Q15	N		IRFP240	6.9	1300				370,99	<u> </u>	644,35		190	<u> </u>	649		190		
Q16	Р		IRFP9240	9.4	1200		1	330	401,90	<u> </u>	ļ	698,04	190	<u> </u>]	69	190		
CIRA NIG=		61	In	06. 51	le:	D4.4	Inc -		le	<u> </u>	544	ln45	le		lna a	lnas.	Te	0	la
SIM NOT WORK	_	Status		Gfs Sie		R14	R15		Freq KHz	<u> </u>	R14	R15	Freq KHz	<u> </u>	R14	R15	Freq KHz	OK	Comment
Q15 Q16	N P		ECX10N20 ECX10P20	1.5	500 500			330	964,57 964,57	 	1675,31	1675,31	190 190	 	1650	165	190 0 190		
[Q20] [CONTOLEO] 1.0] 000 004,07 1073,51													190	l	l	105	J 190		l
SIM NOT WORK	NG	Status	Parts	Gfs Sie	Ciss nF	R14	R15		Freq KHz		R14	R15	Freq KHz	l	R14	R15	Freq KHz	ОК	Comment
Q15	N	Jiaius	ECW20N20	8					535,87	-	930,73		190	-	910		190	OK.	Comment
Q16	P		ECW20P20	3				330			330,73	452,78			310	44			
[1	1==20.20		2000	1	-	200	20.,55			.52,70	150		L			1	ı
								Pair	of transistors	for or	-amp pow	er supply							
Minimum Vds =	60V,	same Vg	s(th) range (4V)				-			1									
DEFAULT	Δĺ	Status		Gfs Sie	Ciss pF	R40	R41		Freq MHz		R40	R41	Freq MHz		R40	R41	Freq MHz	OK	Comment
Q1	Ν		IRF610	0.8	140	10			11,36		126,31		. 9		120		9		
Q4	Р		IRF9610	0.9	170			100	9,36			104,02	9			10	9		