

Transmitter														
IC	Freq. band [MHz]	x-tal freq. example [MHz]	Available packages	Useable for		Min. Adjustment Tolerance [ppm]	Min. Frequency drift over Temperature [ppm]		Max. aging for 10 years [ppm]	Tolerance +/-15%		Max. ESR ⁺² [Ω]	Min. recommended Negative Resistance	CL [pF]
				RKE	TPMS ⁺¹		-40°C..+85°C	-40°C..+125°C		typ. C1 [fF]	typ. C0 [pF]			
TDA5100	434	13,56875	TSS-5032A / B	yes	yes	+/-10	+/-20	+/-40	+/-5	5,4	1,7	60	>=6 times of max ESR value	12
			TSS-6035 B / C	yes	yes	+/-10	+/-20	+/-40	+/-5	6,7	1,85	50	>=6 times of max ESR value	12
TDA5100	868	13,56875	TSS-5032A / B	yes	yes	+/-10	+/-20	+/-40	+/-5	5,4	1,7	60	>=6 times of max ESR value	12
			TSS-6035 B / C	yes	yes	+/-10	+/-20	+/-40	+/-5	6,7	1,85	50	>=6 times of max ESR value	12
TDA5101	315	9,84375	TSS-5032A / B	yes	yes	+/-10	+/-20	+/-40	+/-5	3,5	1,4	100	>=6 times of max ESR value	12
			TSS-6035 B / C	yes	yes	+/-10	+/-20	+/-40	+/-5	4,5	1,5	80	>=6 times of max ESR value	12
TDA5102	915	14,296875	TSS-5032A / B	yes	yes	+/-10	+/-20	+/-40	+/-5	5,7	1,75	60	>=6 times of max ESR value	12
			TSS-6035 B / C	yes	yes	+/-10	+/-20	+/-40	+/-5	7,0	1,92	50	>=6 times of max ESR value	12
TDK5100(F)	434	13,56875	TSS-5032A / B	yes	yes	+/-10	+/-20	+/-40	+/-5	5,4	1,7	60	>=6 times of max ESR value	12
			TSS-6035 B / C	yes	yes	+/-10	+/-20	+/-40	+/-5	6,7	1,85	50	>=6 times of max ESR value	12
TDK5100	868	13,56875	TSS-5032A / B	yes	yes	+/-10	+/-20	+/-40	+/-5	5,4	1,7	60	>=6 times of max ESR value	12
			TSS-6035 B / C	yes	yes	+/-10	+/-20	+/-40	+/-5	6,7	1,85	50	>=6 times of max ESR value	12
TDK5101(F)	315	9,84375	TSS-5032A / B	yes	yes	+/-10	+/-20	+/-40	+/-5	3,5	1,4	100	>=6 times of max ESR value	12
			TSS-6035 B / C	yes	yes	+/-10	+/-20	+/-40	+/-5	4,5	1,5	80	>=6 times of max ESR value	12
TDK5110(F)	434	13,56875	TSS-5032A / B	yes	yes	+/-10	+/-20	+/-40	+/-5	5,4	1,7	60	>=6 times of max ESR value	12
			TSS-6035 B / C	yes	yes	+/-10	+/-20	+/-40	+/-5	6,7	1,85	50	>=6 times of max ESR value	12
TDK5110	868	13,56875	TSS-5032A / B	yes	yes	+/-10	+/-20	+/-40	+/-5	5,4	1,7	60	>=6 times of max ESR value	12
			TSS-6035 B / C	yes	yes	+/-10	+/-20	+/-40	+/-5	6,7	1,85	50	>=6 times of max ESR value	12
TDK5116F	868	13,56875	TSS-5032A / B	yes	yes	+/-10	+/-20	+/-40	+/-5	5,4	1,7	60	>=6 times of max ESR value	12
			TSS-6035 B / C	yes	yes	+/-10	+/-20	+/-40	+/-5	6,7	1,85	50	>=6 times of max ESR value	12
TDK5111(F)	315	9,84375	TSS-5032A / B	yes	yes	+/-10	+/-20	+/-40	+/-5	3,5	1,4	100	>=6 times of max ESR value	12
			TSS-6035 B / C	yes	yes	+/-10	+/-20	+/-40	+/-5	4,5	1,5	80	>=6 times of max ESR value	12
TDA7100	434	13,56875	TSS-5032A / B	yes	no	+/-10	+/-20	+/-40	+/-5	5,4	1,7	60	>=6 times of max ESR value	12
			TSS-6035 B / C	yes	no	+/-10	+/-20	+/-40	+/-5	6,7	1,85	50	>=6 times of max ESR value	12
TDA7110(F)	434	13,56875	TSS-5032A / B	yes	no	+/-10	+/-20	+/-40	+/-5	5,4	1,7	60	>=6 times of max ESR value	12
			TSS-6035 B / C	yes	no	+/-10	+/-20	+/-40	+/-5	6,7	1,85	50	>=6 times of max ESR value	12
TDA7110	868	13,56875	TSS-5032A / B	yes	no	+/-10	+/-20	+/-40	+/-5	5,4	1,7	60	>=6 times of max ESR value	12
			TSS-6035 B / C	yes	no	+/-10	+/-20	+/-40	+/-5	6,7	1,85	50	>=6 times of max ESR value	12
TDA7116F	868	13,56875	TSS-5032A / B	yes	no	+/-10	+/-20	+/-40	+/-5	5,4	1,7	60	>=6 times of max ESR value	12
			TSS-6035 B / C	yes	no	+/-10	+/-20	+/-40	+/-5	6,7	1,85	50	>=6 times of max ESR value	12

Receiver														
IC	Freq. band [MHz]	x-tal freq. example [MHz]	Available packages	Useable for		Min. Adjustment Tolerance [ppm]	Min. Frequency drift over Temperature [ppm]		Max. aging for 10 years [ppm]	Tolerance +/-15%		Max. ESR ⁺² [Ω]	Min. recommended Negative Resistance	CL [pF]
				RKE	TPMS ⁺¹		-40°C..+85°C	-40°C..+125°C		typ. C1 [fF]	typ. C0 [pF]			
TDA5200	434	13,234375	TSS-5032A / B	yes	yes	+/-10	+/-20	+/-40	+/-5	5,1	1,65	60	>=6 times of max ESR value	12
			TSS-6035 B / C	yes	yes	+/-10	+/-20	+/-40	+/-5	6,5	1,8	50	>=6 times of max ESR value	12
TDA5201	315	10,178125	TSS-5032A / B	yes	yes	+/-10	+/-20	+/-40	+/-5	3,8	1,42	80	>=6 times of max ESR value	12
			TSS-6035 B / C	yes	yes	+/-10	+/-20	+/-40	+/-5	5,0	1,6	60	>=6 times of max ESR value	12
TDA5210	434	13,234375	TSS-5032A / B	yes	yes	+/-10	+/-20	+/-40	+/-5	5,1	1,65	60	>=6 times of max ESR value	12
			TSS-6035 B / C	yes	yes	+/-10	+/-20	+/-40	+/-5	6,5	1,8	50	>=6 times of max ESR value	12
TDA5210	868	13,401563	TSS-5032A / B	yes	yes	+/-10	+/-20	+/-40	+/-5	5,2	1,66	60	>=6 times of max ESR value	12
			TSS-6035 B / C	yes	yes	+/-10	+/-20	+/-40	+/-5	6,6	1,85	50	>=6 times of max ESR value	12
TDA5211	315	10,178125	TSS-5032A / B	yes	yes	+/-10	+/-20	+/-40	+/-5	3,8	1,42	80	>=6 times of max ESR value	12
			TSS-6035 B / C	yes	yes	+/-10	+/-20	+/-40	+/-5	5,0	1,6	60	>=6 times of max ESR value	12
TDA5212	915	14,129688	TSS-5032A / B	yes	yes	+/-10	+/-20	+/-40	+/-5	5,6	1,72	60	>=6 times of max ESR value	12
			TSS-6035 B / C	yes	yes	+/-10	+/-20	+/-40	+/-5	6,9	1,9	50	>=6 times of max ESR value	12
TDA5220	434	13,234375	TSS-5032A / B	yes	yes	+/-10	+/-20	+/-40	+/-5	5,1	1,65	60	>=6 times of max ESR value	12
			TSS-6035 B / C	yes	yes	+/-10	+/-20	+/-40	+/-5	6,5	1,8	50	>=6 times of max ESR value	12
TDA5220	868	13,401563	TSS-5032A / B	yes	yes	+/-10	+/-20	+/-40	+/-5	5,2	1,66	60	>=6 times of max ESR value	12
			TSS-6035 B / C	yes	yes	+/-10	+/-20	+/-40	+/-5	6,6	1,85	50	>=6 times of max ESR value	12
TDA5221	315	10,178125	TSS-5032A / B	yes	yes	+/-10	+/-20	+/-40	+/-5	3,8	1,42	80	>=6 times of max ESR value	12
			TSS-6035 B / C	yes	yes	+/-10	+/-20	+/-40	+/-5	5,0	1,6	60	>=6 times of max ESR value	12
TDA7200	434	13,234375	TSS-5032A / B	yes	no	+/-10	+/-20	+/-40	+/-5	5,1	1,65	60	>=6 times of max ESR value	12
			TSS-6035 B / C	yes	no	+/-10	+/-20	+/-40	+/-5	6,5	1,8	50	>=6 times of max ESR value	12
TDA7210	434	13,234375	TSS-5032A / B	yes	no	+/-10	+/-20	+/-40	+/-5	5,1	1,65	60	>=6 times of max ESR value	12
			TSS-6035 B / C	yes	no	+/-10	+/-20	+/-40	+/-5	6,5	1,8	50	>=6 times of max ESR value	12
TDA7210	868	13,401563	TSS-5032A / B	yes	no	+/-10	+/-20	+/-40	+/-5	5,2	1,66	60	>=6 times of max ESR value	12
			TSS-6035 B / C	yes	no	+/-10	+/-20	+/-40	+/-5	6,6	1,85	50	>=6 times of max ESR value	12
TDA7210V	434	13,234375	TSS-5032A / B	yes	no	+/-10	+/-20	+/-40	+/-5	5,1	1,65	60	>=6 times of max ESR value	12
			TSS-6035 B / C	yes	no	+/-10	+/-20	+/-40	+/-5	6,5	1,8	50	>=6 times of max ESR value	12
TDA7210V	868	13,401563	TSS-5032A / B	yes	no	+/-10	+/-20	+/-40	+/-5	5,2	1,66	60	>=6 times of max ESR value	12
			TSS-6035 B / C	yes	no	+/-10	+/-20	+/-40	+/-5	6,6	1,85	50	>=6 times of max ESR value	12

Transceiver														
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				RKE	TPMS ^{*1}		-40°C..+85°C	-40°C..+125°C		typ. C1	typ. C0			
										[fF]	[pF]			
TDA5250	868	18,089583	TSS-5032A / B	yes	yes	+/-10	+/-20	+/-40	+/-5	6,7	1,9	60	>=6 times of max ESR value	20
			TSS-6035 B / C	yes	yes	+/-10	+/-20	+/-40	+/-5	8,5	2,3	50	>=6 times of max ESR value	20
TDA5251	315	13,125	TSS-6035 B / C	yes	yes	+/-10	+/-20	+/-40	+/-5	6,7	1,85	50	>=6 times of max ESR value	20
TDA5255	434	18,089583	TSS-5032A / B	yes	yes	+/-10	+/-20	+/-40	+/-5	6,7	1,9	60	>=6 times of max ESR value	20
			TSS-6035 B / C	yes	yes	+/-10	+/-20	+/-40	+/-5	8,5	2,3	50	>=6 times of max ESR value	20
TDA7255V	434	18,089583	TSS-5032A / B	yes	no	+/-10	+/-20	+/-40	+/-5	6,7	1,9	60	>=6 times of max ESR value	20
			TSS-6035 B / C	yes	no	+/-10	+/-20	+/-40	+/-5	8,5	2,3	50	>=6 times of max ESR value	20

Important Notice

*1: For TPMS application it is recommended to use TSS-5032B and TSS-6035C which offer 6 Pad design for more strength connectivity with PCB and also 4 point mounting of crystal Blank for better withstand for shock and acceleration.
 As there is no standard for TPMS (mechanical) suitability available, the customer has to decide by himself whether the mechanical characteristic and tests fits to the requirements. For that purpose please contact the crystal manufacturer or importer.
 *2: Typical ESR values around 20 to 50% of max value. The distribution of ESR values should be around 70% based on gaussian distribution curve.

In case of need of further information and samples please contact:

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