

6.3 CRYSTALS AND OSCILLATORS (03)

6.3.1 Crystals

CRYSTALS, TO-5 CAN				333C
Procurement Specifications	Manufacturer	Nature of Approval	Supervising Authority	Initial Qualification Date
Generic ESCC 3501 Detail ESCC 3501/018	RAKON France Pont Sainte Marie France	Qualification	CNES	Sept 2015
		Previously qualified in Argenteuil site		(Oct. 1979)
		Remarks Upon receipt of a request for any retired Variant, the Manufacturer will allocate a new Specific Crystal Identification Number in accordance with 3501/018. It will have identical crystal characteristics to those of the retired variant.		
Qualified range: All variants are qualified. Types covered by similarity: All variants previously specified in (retired) specifications: 3501/001, 3501/008, 3501/011, 3501/012 TO-5 Can (T 807) Frequency Ranges:				
		AT (MHz)	SC (MHz)	
P1		14 to 35	15 to 38	
P3		20 to 100	22 to 110	
P5		45 to 140	55 to 140	

CRYSTALS, TO-8 CAN				334C												
Procurement Specifications	Manufacturer	Nature of Approval	Supervising Authority	Initial Qualification Date												
Generic ESCC 3501 Detail ESCC 3501/019	RAKON France Pont Sainte Marie France	Qualification	CNES	Sept 2015												
		Previously qualified in Argenteuil site		(Oct. 1979)												
		Remarks Upon receipt of a request for any retired Variant, the Manufacturer will allocate a new Specific Crystal Identification Number in accordance with 3501/019. It will have identical crystal characteristics to those of the retired variant.														
Qualified range: All variants are qualified. Types covered by similarity: All variants previously specified in (retired) specifications: 3501/002, 3501/009 TO-8 Can (T 1507) Frequency Ranges: <table><tr><td></td><td>AT (MHz)</td><td>SC (MHz)</td></tr><tr><td>P1</td><td>3 to 20</td><td>3 to 22</td></tr><tr><td>P3</td><td>10 to 30</td><td>10 to 33</td></tr><tr><td>P5</td><td>15 to 65</td><td>16 to 71</td></tr></table>						AT (MHz)	SC (MHz)	P1	3 to 20	3 to 22	P3	10 to 30	10 to 33	P5	15 to 65	16 to 71
	AT (MHz)	SC (MHz)														
P1	3 to 20	3 to 22														
P3	10 to 30	10 to 33														
P5	15 to 65	16 to 71														

6.3.2 Oscillators

CRYSTAL OSCILLATOR RK135, CLASS 2, 4MHz to 100MHz, AHC MOS compatible output, Rad-Hard				371		
Procurement Specifications	Manufacturer	Nature of Approval	Supervising Authority	Initial Qualification Date		
Generic ESCC 3503 Detail ESCC 3503/001	RAKON France Pont Sainte Marie France	Qualification	CNES	Feb 2021		
Remarks						
Qualified range:						
Variant Number	Nominal Output Frequency f_{Nom} (MHz)	Case	Nominal Supply Voltage V_{CCNom} (V)	Terminal Material and Finish	Weight max g	Total Dose Radiation Level Letter
01	4 to 100	FP1	3.3	D2	5	R [100krad(Si)]
02	4 to 100	FP2	3.3	D2	5	R [100krad(Si)]
03	4 to 100	FP3	3.3	D2	5	R [100krad(Si)]
04	4 to 100	FP4	3.3	D2	5	R [100krad(Si)]
05	4 to 100	DIL1	3.3	G2	5	R [100krad(Si)]
07	4 to 100	FP1	5	D2	5	R [100krad(Si)]
08	4 to 100	FP2	5	D2	5	R [100krad(Si)]
09	4 to 100	FP3	5	D2	5	R [100krad(Si)]
10	4 to 100	FP4	5	D2	5	R [100krad(Si)]
11	4 to 100	DIL1	5	G2	5	R [100krad(Si)]
Operating Temperature Range (°C): -55 to +110						