

6.3 CRYSTALS AND OSCILLATORS (03)

6.3.1 Crystals

CRYSTALS, TO-5 CAN				333D												
Procurement Specifications	Manufacturer	Nature of Approval	Supervising Authority	Initial Qualification Date												
Generic	RAKON France Pont Sainte Marie France	Qualification	CNES	Sept 2015												
ESCC 3501		Previously qualified in Argenteuil site		(Oct. 1979)												
Detail ESCC 3501/018		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.														
<p>Qualified range:</p> <p>All variants are qualified.</p> <p>Types covered by similarity:</p> <p>All variants previously specified in (retired) specifications: 3501/001, 3501/008, 3501/011, 3501/012</p> <p>TO-5 Can (T 807)</p> <p>Frequency Ranges:</p> <table border="1" data-bbox="507 1592 1002 1778"> <thead> <tr> <th></th> <th>AT (MHz)</th> <th>SC (MHz)</th> </tr> </thead> <tbody> <tr> <td>P1</td> <td>14 to 35</td> <td>15 to 38</td> </tr> <tr> <td>P3</td> <td>20 to 100</td> <td>22 to 110</td> </tr> <tr> <td>P5</td> <td>45 to 140</td> <td>55 to 140</td> </tr> </tbody> </table>						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
	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				334D												
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.														
<p>Qualified range:</p> <p>All variants are qualified.</p> <p>Types covered by similarity:</p> <p>All variants previously specified in (retired) specifications: 3501/002, 3501/009</p> <p>TO-8 Can (T 1507)</p> <p>Frequency Ranges:</p> <table border="1" data-bbox="507 1355 1002 1541"> <thead> <tr> <th></th> <th>AT (MHz)</th> <th>SC (MHz)</th> </tr> </thead> <tbody> <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> </tbody> </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, AHCMOS compatible output, Rad-Hard				371A		
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: For frequencies below 24MHz, Customers should contact Rakon to confirm feasibility and availability.						
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)]
Operating Temperature Range (°C): -55 to +110						