

6.3 CRYSTALS (03)

CRYSTALS, TO-5 CAN				333B												
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.														
<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 1491 1002 1675"> <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				334B												
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, AHC MOS compatible output, Rad-Hard				<b><u>371</u></b>		
Procurement Specifications	Manufacturer	Nature of Approval	Supervising Authority	Initial Qualification Date		
Generic ESCC <a href="#">3503</a> Detail ESCC <a href="#">3503/001</a>	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						