

6.1.3 Tantalum

CAPACITORS, LEADLESS SURFACE MOUNTED, TANTALUM, SOLID ELECTROLYTE, TYPE TAJ				196M
Procurement Specifications	Manufacturer	Nature of Approval	Supervising Authority	Initial Qualification Date
Generic ESCC 3012	Kyocera AVX components sro Lanskroun Czech Republic	Qualification	ESA	Jun 1993
Detail ESCC 3012/001		Remarks:		
<p>Qualified Range:</p> <p>Variants 01 to 07 and 11 to 17 are qualified</p> <p>Termination finish:</p> <ul style="list-style-type: none"> • A and B case sizes are available in NILO only, e.g., Variant 01 (A case), Variant 02 (B case) • C, D, E case sizes are available as Copper only, e.g., Variant 13 (C case), Variant 14 (D case), Variant 17 (E case) 				

POLYMER MULTI ANODE TANTALUM CAPACITOR BASED ON TCS TYPE.				366B																																																																																																																				
Procurement Specifications	Manufacturer	Nature of Approval	Supervising Authority	Initial Qualification Date																																																																																																																				
Generic ESCC 3012 Detail ESCC 3012/006	Kyocera AVX components sro Lanskroun Czech Republic	Qualification	ESA	Apr 2020																																																																																																																				
Remarks:																																																																																																																								
<p>Qualified Range:</p> <p>Variant 01. Case style E (2917). Tolerance: $\pm 20\%$.</p> <table border="1"> <thead> <tr> <th rowspan="2">Capacitance C_n</th> <th colspan="8">DC Rated Voltage U_R</th> </tr> <tr> <th>4V</th> <th>6.3V</th> <th>10V</th> <th>16V</th> <th>20V</th> <th>25V</th> <th>35V</th> <th>50V</th> </tr> </thead> <tbody> <tr> <td>15μF</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>100mΩ</td> </tr> <tr> <td>22μF</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>50mΩ</td> <td>75mΩ</td> </tr> <tr> <td>33μF</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>50mΩ</td> <td>50mΩ</td> <td></td> </tr> <tr> <td>47μF</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>50mΩ</td> <td></td> <td></td> </tr> <tr> <td>68μF</td> <td></td> <td></td> <td></td> <td></td> <td>25mΩ</td> <td></td> <td></td> <td></td> </tr> <tr> <td>100μF</td> <td></td> <td></td> <td></td> <td></td> <td>25mΩ</td> <td></td> <td></td> <td></td> </tr> <tr> <td>150μF</td> <td></td> <td></td> <td></td> <td>20mΩ</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>220μF</td> <td></td> <td></td> <td>15mΩ</td> <td>20mΩ</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>330μF</td> <td></td> <td>12mΩ</td> <td>15mΩ</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>470μF</td> <td>12mΩ</td> <td>12mΩ</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>680μF</td> <td>12mΩ</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>Operating Temperature Range ($^{\circ}$C):-55 to +105</p>					Capacitance C_n	DC Rated Voltage U_R								4V	6.3V	10V	16V	20V	25V	35V	50V	15 μ F								100m Ω	22 μ F							50m Ω	75m Ω	33 μ F						50m Ω	50m Ω		47 μ F						50m Ω			68 μ F					25m Ω				100 μ F					25m Ω				150 μ F				20m Ω					220 μ F			15m Ω	20m Ω					330 μ F		12m Ω	15m Ω						470 μ F	12m Ω	12m Ω							680 μ F	12m Ω							
Capacitance C_n	DC Rated Voltage U_R																																																																																																																							
	4V	6.3V	10V	16V	20V	25V	35V	50V																																																																																																																
15 μ F								100m Ω																																																																																																																
22 μ F							50m Ω	75m Ω																																																																																																																
33 μ F						50m Ω	50m Ω																																																																																																																	
47 μ F						50m Ω																																																																																																																		
68 μ F					25m Ω																																																																																																																			
100 μ F					25m Ω																																																																																																																			
150 μ F				20m Ω																																																																																																																				
220 μ F			15m Ω	20m Ω																																																																																																																				
330 μ F		12m Ω	15m Ω																																																																																																																					
470 μ F	12m Ω	12m Ω																																																																																																																						
680 μ F	12m Ω																																																																																																																							

CAPACITORS, LEADLESS SURFACE MOUNTED, TANTALUM, SOLID ELECTROLYTE, TYPE TES				327F																																																																																																																													
Procurement Specifications	Manufacturer	Nature of Approval	Supervising Authority	Initial Qualification Date																																																																																																																													
Generic ESCC 3012 Detail ESCC 3012/004	Kyocera AVX components sro Lanskroun Czech Republic	Qualification	ESA	Oct 2013																																																																																																																													
Remarks:																																																																																																																																	
<p>Qualified Range:</p> <p>Variants 01 to 05. Case styles A (1206), B (1210), C (2312), D (2917), E (2917)</p> <table border="1"> <thead> <tr> <th rowspan="2">Capacitance C_n (µF)</th> <th colspan="8">DC Rated Voltage U_R</th> </tr> <tr> <th>6.3V</th> <th>10V</th> <th>12V</th> <th>16V</th> <th>20V</th> <th>25V</th> <th>35V</th> <th>50V</th> </tr> </thead> <tbody> <tr> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>A 3000</td> <td></td> <td>B 2000</td> </tr> <tr> <td>3.3</td> <td></td> <td></td> <td></td> <td></td> <td>A 2500</td> <td></td> <td>B 1000</td> <td>C 1000</td> </tr> <tr> <td>4.7</td> <td></td> <td></td> <td></td> <td>A 2000</td> <td></td> <td>B 1000</td> <td>C 600</td> <td>D 200</td> </tr> <tr> <td>10</td> <td></td> <td>A 1800</td> <td></td> <td></td> <td>B 1000</td> <td>C 600</td> <td>D 120</td> <td>E 120</td> </tr> <tr> <td>22</td> <td>A 900</td> <td></td> <td></td> <td>B 600</td> <td>C 400</td> <td></td> <td>D 100</td> <td></td> </tr> <tr> <td>33</td> <td></td> <td>B 650</td> <td></td> <td></td> <td>C 300</td> <td>D 65</td> <td>E 65</td> <td></td> </tr> <tr> <td>47</td> <td>B 500</td> <td></td> <td></td> <td>C 350</td> <td>D 55</td> <td>E 65</td> <td></td> <td></td> </tr> <tr> <td>100</td> <td></td> <td>C 200</td> <td></td> <td>D 55</td> <td>E 45</td> <td></td> <td></td> <td></td> </tr> <tr> <td>150</td> <td>C 300</td> <td>D 45</td> <td></td> <td>E 40</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>220</td> <td></td> <td>D 35</td> <td>E 35</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>330</td> <td>D 35</td> <td>E 35</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>470</td> <td>E 30</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>Operating Temperature Range (°C):-55 to +105</p>					Capacitance C _n (µF)	DC Rated Voltage U _R								6.3V	10V	12V	16V	20V	25V	35V	50V	1						A 3000		B 2000	3.3					A 2500		B 1000	C 1000	4.7				A 2000		B 1000	C 600	D 200	10		A 1800			B 1000	C 600	D 120	E 120	22	A 900			B 600	C 400		D 100		33		B 650			C 300	D 65	E 65		47	B 500			C 350	D 55	E 65			100		C 200		D 55	E 45				150	C 300	D 45		E 40					220		D 35	E 35						330	D 35	E 35							470	E 30							
Capacitance C _n (µF)	DC Rated Voltage U _R																																																																																																																																
	6.3V	10V	12V	16V	20V	25V	35V	50V																																																																																																																									
1						A 3000		B 2000																																																																																																																									
3.3					A 2500		B 1000	C 1000																																																																																																																									
4.7				A 2000		B 1000	C 600	D 200																																																																																																																									
10		A 1800			B 1000	C 600	D 120	E 120																																																																																																																									
22	A 900			B 600	C 400		D 100																																																																																																																										
33		B 650			C 300	D 65	E 65																																																																																																																										
47	B 500			C 350	D 55	E 65																																																																																																																											
100		C 200		D 55	E 45																																																																																																																												
150	C 300	D 45		E 40																																																																																																																													
220		D 35	E 35																																																																																																																														
330	D 35	E 35																																																																																																																															
470	E 30																																																																																																																																