CAPACITORS, CERAMIC, TYPE II, MULTIPLE LAYERS, BASED ON TYPES CNC 31 to 34, LEAD TYPES NE, PE, LE AND PLE				**315G**
Procurement Specifications	Manufacturer	Nature of Approval	Supervising Authority	Initial Qualification Date
Generic ESCC 3001 Detail ESCC 3001/037	Exxelia Technologies Chanteloup en Brie France	Qualification	CNES	Nov 2011
		Remarks		

Qualified Range:

Variants 01 to 16.
16V : 2.2 to 68 µF
25V: 1.2 to 39 µF

E12 ±10% tolerance

DIL format with equal number of leads per side
Lead material : type A with type 10 finish (electro-deposited 98% Ag min.)

Operating Temperature Range (ºC): -55 to +125

CAPACITORS, CERAMIC, TYPE II, 50V to 500V, BASED ON TYPES CNC53 to CNC56.				**306G**
Procurement Specifications	Manufacturer	Nature of Approval	Supervising Authority	Initial Qualification Date
Generic ESCC 3001 Detail ESCC 3001/038	Exxelia Technologies Chanteloup en Brie France	Qualification	CNES	Mar 2011
		Remarks:		

Qualified Range:

Variants 01 to 04, 08 to 11, 15 to 18 and 22 to 25 are qualified
All values 50V to 500V
E12: ±10% tolerance

Operating Temperature Range (°C): -55 to +125

CAPACITORS, CERAMIC, FIXED, CHIP, TYPE I				323F
Procurement Specifications	Manufacturer	Nature of Approval	Supervising Authority	Initial Qualification Date
Generic ESCC 3009 Detail ESCC	ExxeliaTechnologies Chanteloup en Brie France	Qualification	CNES	Oct 2012
		Remarks:		

3009/003, 3009/004, 3009/005, 3009/006, 3009/022, 3009/037, 3009/040, 3009/042

Qualified range:

Style	Model	Detail Spec	Variants	Capacitance Range (pF)			Rated Voltage	Tolerance
0805	CEC202S	3009/003	06	1	to	2 700	16	
	CEC204S	3009/040	02	1	to	2 200	25	
				1	to	1 800	50	
				1	to	1 200	100	
1210	CEC402S	3009/004	06	10	to	15 000	16	
	CEC404S	3009/040	04	10	to	12 000	25	
				10	to	12 000	50	
				10	To	6 800	100	
1812	CEC602S	3009/005	06	100	to	33 000	16	<10pF 0.25—0.5 –1 (pF) ≥10pF 1, 2, 5, 10 (±%)
	CEC604S	3009/040	05	100	to	27 000	25	
				100	to	22 000	50	
				100	to	12 000	100	
2220	CEC702S	3009/006	06	470	to	68 000	16	
	CEC704S	3009/040	06	470	to	56 000	25	
				470	to	47 000	50	
				470	to	27 000	100	
1206	CEC1202S	3009/022	06	1	to	6 800	16	
	CEC1204S	3009/040	03	1	to	5 600	25	
				1	to	5 600	50	
				1	to	3 900	100	
0603	CEC1402S	3009/037	06	1	to	1 000	16	
	CEC1404S	3009/040	01	1	to	680	25	
				1	to	560	50	
				1	to	330	100	
0402	CEC1902S	3009/042	06	1	to	330	10	
	CEC1904S	3009/040	13	1	to	120	16	
				1	to	100	25	
				1	to	82	50	

Operating Temp. Range (°C), -55 to +125

CAPACITORS, CERAMIC, FIXED, CHIP, TYPE II				324F
Procurement Specifications	Manufacturer	Nature of Approval	Supervising Authority	Initial Qualification Date
Generic ESCC 3009 Detail ESCC	ExxeliaTechnologies Chanteloup en Brie France	Qualification	CNES	Oct 2012

3009/008, 3009/009, 3009/010, 3009/011, 3009/023, 3009/038, 3009/039, 3009/043

Qualified range:

Style	Model	Detail Spec	Variants	Capacitance Range			Rated Voltage	Tolerance (±%)
0805	CNC202S	3009/008	06	1 000	to	150 000	16	5, 10, 20
				1 000	to	100 000	25	
				1 000	to	47 000	50	
				1 000	to	10 000	100	
			07	1 000	to	390 000	16	5, 10, 20
				1 000	to	150 000	25	
				1 000	to	100 000	50	
				1 000	to	47 000	100	
0805	CNC204S	3009/039	02	1 000	to	150 000	16	5, 10, 20
				1 000	to	100 000	25	
				1 000	to	47 000	50	
				1 000	to	10 000	100	
			14	1 000	to	390 000	16	5, 10, 20
				1 000	to	150 000	25	
				1 000	to	100 000	50	
				1 000	to	47 000	100	
1210	CNC402S	3009/009	06	2 200	to	560 000	16	5, 10, 20
				2 200	to	390 000	25	
				2 200	to	220 000	50	
				2 200	to	56 000	100	
			07	2 200	to	820 000	16	5, 10, 20
				2 200	to	560 000	25	
				2 200	to	390 000	50	
				2 200	to	220 000	100	
	CNC404S	3009/039	04	2 200	to	560 000	16	5, 10, 20
				2 200	to	390 000	25	
				2 200	to	220 000	50	
				2 200	to	56 000	100	
			16	2 200	to	820 000	16	5, 10, 20
				2 200	to	560 000	25	
				2 200	to	390 000	50	
				2 200	to	220 000	100	
1812	CNC602S	3009/010	06	3 900	to	1 200 000	16	5, 10, 20
				3 900	to	680 000	25	
				3 900	to	470 000	50	
				3 900	to	120 000	100	

CAPACITORS, CERAMIC, FIXED, CHIP, TYPE II								324F
	CNC602S	3009/010	07	3 900	to	1 800 000	16	5, 10, 20
				3 900	to	1 200 000	25	
				3 900	to	820 000	50	
				3 900	to	470 000	100	
	CNC604S	3009/039	05	3 900	to	1 200 000	16	5, 10, 20
				3 900	to	680 000	25	
				3 900	to	470 000	50	
				3 900	to	120 000	100	
			17	3 900	to	1 800 000	16	5, 10, 20
				3 900	to	1 200 000	25	
				3 900	to	820 000	50	
				3 900	to	470 000	100	
2220	CNC702S	3009/011	06	22 000	to	2 700 000	16	5, 10, 20
				22 000	to	1 500 000	25	
				22 000	to	1 000 000	50	
				22 000	to	270 000	100	
			07	22 000	to	3 900 000	16	5, 10, 20
				22 000	to	2 200 000	25	
				22 000	to	1 800 000	50	
				22 000	to	1 000 000	100	
	CNC704S	3009/039	06	22 000	to	2 700 000	16	5, 10, 20
				22 000	to	1 500 000	25	
				22 000	to	1 000 000	50	
				22 000	to	270 000	100	
			18	22 000	to	3 900 000	16	5, 10, 20
				22 000	to	2 200 000	25	
				22 000	to	1 800 000	50	
				22 000	to	1 000 000	100	
1206	CNC1202S	3009/023	06	1 800	to	270 000	16	5, 10, 20
				1 800	to	180 000	25	
				1 800	to	82 000	50	
				1 800	to	27 000	100	
			07	1 800	to	1 000 000	16	5, 10, 20
				1 800	to	270 000	25	
				1 800	to	180 000	50	
				1 800	to	120 000	100	
	CNC1204S	3009/039	03	1 800	to	270 000	16	5, 10, 20
				1 800	to	180 000	25	
				1 800	to	82 000	50	
				1 800	to	27 000	100	
			15	1 800	to	1 000 000	16	5, 10, 20
				1 800	to	270 000	25	
				1 800	to	180 000	50	
				1 800	to	120 000	100	
0603	CNC1402S	3009/038	06	270	to	33 000	16	5, 10, 20
				270	to	22 000	25	
				270	to	10 000	50	
				270	to	2 700	100	
			07	270	to	100 000	16	5, 10, 20
				270	to	33 000	25	
				270	to	22 000	50	
				270	to	12 000	100	
	CNC1404S	3009/039	01	270	to	33 000	16	5, 10, 20
				270	to	22 000	25	

CAPACITORS, CERAMIC, FIXED, CHIP, TYPE II								324F
				270 to 10 000			50	
				270 to 2 700			100	
			13	270 to 100 000			16	5, 10, 20
				270 to 33 000			25	
				270 to 22 000			50	
				270 to 12 000			100	
0402	CNC1902S	3009/043	06	68 to 12 000			10	5, 10, 20
				68 to 8 200			16	
				68 to 5 600			25	
				68 to 3 300			50	
	CNC1904S	3009/039	25	68 to 12 000			10	5, 10, 20
				68 to 8 200			16	
				68 to 5 600			25	
				68 to 3 300			50	
Operating Temperature Range (°C), -55 to +125								

6.1.4 Fixed Film

CAPACITORS, FIXED, RECONSTITUTED MICA, HIGH VOLTAGE, BASED ON TYPE HT86PS AND HT97PS				**251N**
Procurement Specifications	Manufacturer	Nature of Approval	Supervising Authority	Initial Qualification Date
Generic ESCC 3006 Detail ESCC 3006/022 3006/027	Exxelia Technologies Chanteloup en Brie France	Qualification	CNES	Aug 1998
		Remarks:		

Qualified Range:

Detail Spec 3006/022:

Capacitance Range (nF)			Tol. (±%)	UR(kV)
22	to	2 200	10; 20	1.5
15	to	1 500	10; 20	2.5
10	to	1 000	10; 20	3.5
4.7	to	470	10; 20	5.0
2.2	to	220	10; 20	7.5
0.1	to	100	10; 20	10.0
0.1	to	68	10; 20	12.5
0.1	to	33	10; 20	15.0
0.1	to	15	10; 20	20.0

Detail Spec 3006/027:

Capacitance Range (nF)			Tol. (±%)	UR(kV)
22	to	2 200	10; 20	1.5
15	to	1 500	10; 20	2.5
6.8	to	1 500	10; 20	3.5
3.3	to	680	10; 20	5.0
2.2	to	330	10; 20	7.5
1	to	150	10; 20	10.0
1	to	100	10; 20	12.5
1	to	68	10; 20	15.0
0.1	to	33	10; 20	20.0

Operating Temperature Range, (°C): -55 to +125

6.5 FILTERS (05)

6.5.1 Feedthrough

CAPACITORS FILTERS, C-TYPE, FEED THROUGH, HERMETICALLY SEALED (ONE END ONLY), BASED ON TYPE SFC030, SFC035 and SFC040				**375B**
Procurement Specifications	Manufacturer	Nature of Approval	Supervising Authority	Initial Qualification Date
Generic ESCC 3008 Detail ESCC	EXXELIA Technologies Chanteloup en Brie France	Qualification	CNES	Sept 2021
		Remarks The SFC filters were qualified and covered by certificate 252 (initial qualification date: August 1998). The certificate 252 was suspended in June 2020.		
3008/020 3008/031 3008/032				
Qualified range: ESCC 3008/020: variants 01, 02, 04 and 05 ESCC 3008/031: variants 01, 02, 04 and 05 ESCC 3008/032: variants 01, 02, 04, 05, 07, 08, 10, 11 Operating Temperature Range (°C): -55 to +125				