

MIL Qualified - CLR81

MIL 39006/25



Wet tantalum capacitors  
**High Capacitance**  
**Hermetically sealed tantalum case**  
 Axial leads  
 Polarized type

## ELECTRICAL AND CLIMATIC CHARACTERISTICS

	MIL 39006/25
Detail specification	MIL-PRF-39006/25 Failure rate level M
Operating temperature	-55°C +125°C
Capacitance range	6,8µF ⇒ 2200µF
Tolerance	± 10% - ± 20%
Voltage range	25V ⇒ 125V
Max. capacitance change -55°C	see table
Max. capacitance change +85°C	see table
Max. capacitance change +125°C	see table
Maximum DF at +25°C	see table
Max. impedance at 120Hz -55°C	see table
Max. leakage current at +25°C	see table
Max. leakage current at +85°C / +125°C	see table
Max. ripple current 40kHz +85°C	see table
Max. reverse voltage at +85°C	3 volts
Max. reverse voltage at +125°C	2 volts
Max. surge voltage at +85°C	1,15 x U <sub>R</sub>

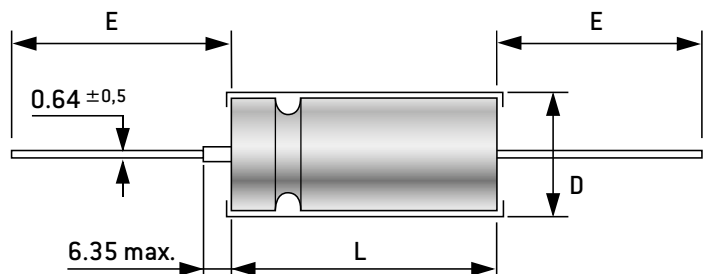
## DIMENSIONS [mm]

Case code	Without insulating sleeve		With insulating sleeve	Lead length E ± 6,35
	D ± 0,41	L <sup>+0,79</sup> <sub>-0,41</sub>	D max.	
T1	4,78	11,51	5,56	38,10
T2	7,14	16,28	7,92	57,15
T3	9,52	19,46	10,31	57,15
T4	9,52	26,97	10,31	57,15

MARKING, PACKAGING, CONSTRUCTION:  
 see general characteristics

## HOW TO ORDER

EXXELIA PN	Model code	Dash Number	Vibration and shock [optional]
	M39006/25	-0220	H
		See Ratings and Case code table	- = Without H = With



# MIL 39006/25

## STANDARD RATINGS - ELECTRICAL CHARACTERISTICS

Capacitance 120Hz +25°C ( $\mu$ F)	Case (code)	Dash Number		Capacitance maximum change			Max. DF +25°C (%)	Max. Impedance 120Hz -55°C ( $\Omega$ )	Max. I leak		I rms Max. 40kHz +85°C (mA)	Max. ESR 120Hz +25°C ( $\Omega$ )
		$\pm 10\%$	$\pm 20\%$	-55°C (%)	+85°C (%)	+125°C (%)			+25°C ( $\mu$ A)	+85°C +125°C ( $\mu$ A)		
<b>Rated voltage (+85°C) 25 V - Derated voltage (+125°C) 15 V</b>												
68	T1	0034	0033	-40	+12	+15	22	90	2	9	850	4,29
270	T2	0036	0035	-62	+13	+16	55	33	3	16	1400	2,70
560	T3	0038	0037	-72	+20	+25	76	24	7	28	1750	1,80
680	T4	0040	0039	-72	+25	+30	63	19	8	32	2100	1,23
<b>Rated voltage (+85°C) 30 V - Derated voltage (+125°C) 20 V</b>												
56	T1	0042	0041	-38	+12	+15	22	100	2	9	800	5,21
220	T2	0044	0043	-60	+13	+16	42	36	3	16	1200	2,53
470	T3	0046	0045	-65	+20	+25	64	25	8	32	1500	1,81
560	T4	0048	0047	-65	+25	+30	55	20	9	36	2000	1,30
<b>Rated voltage (+85°C) 50 V - Derated voltage (+125°C) 30 V</b>												
33	T1	0050	0049	-29	+10	+12	12,3	135	2	9	700	4,95
120	T2	0052	0051	-42	+12	+15	22,5	49	4	24	1200	2,49
270	T3	0054	0053	-46	+20	+25	37	29	8	32	1450	1,82
330	T4	0056	0055	-46	+25	+30	38	22	9	36	1900	1,53
<b>Rated voltage (+85°C) 60 V - Derated voltage (+125°C) 40 V</b>												
27	T1	0058	0057	-24	+10	+12	10,2	144	3	12	700	5,01
100	T2	0060	0059	-36	+12	+15	19	54	4	20	1100	2,52
220	T3	0062	0061	-40	+16	+20	30	29	8	32	1400	1,81
270	T4	0064	0063	-45	+20	+25	27	23	9	36	1850	1,33
<b>Rated voltage (+85°C) 75 V - Derated voltage (+125°C) 50 V</b>												
22	T1	0066	0065	-19	+10	+12	8,5	157	3	12	600	5,13
82	T2	0068	0067	-30	+12	+15	15,2	63	4	24	1000	2,46
180	T3	0070	0069	-35	+16	+20	24,4	30	9	36	1300	2,23
220	T4	0072	0071	-40	+20	+25	37	24	10	40	1800	1,80
<b>Rated voltage (+85°C) 100 V - Derated voltage (+125°C) 65 V</b>												
10	T1	0074	0073	-17	+10	+12	4,5	200	3	12	800	5,97
39	T2	0076	0075	-20	+12	+15	10,4	80	5	24	1300	3,54
68	T3	0078	0077	-30	+14	+16	11,3	40	10	40	1600	2,21
120	T4	0080	0079	-35	+15	+17	25	30	12	48	2000	2,76
<b>Rated voltage (+85°C) 125 V - Derated voltage (+125°C) 85 V</b>												
6,8	T1	0082	0081	-14	+10	+12	6	300	3	12	700	11,71
27	T2	0084	0083	-18	+12	+15	7,2	90	5	24	1200	3,54
47	T3	0086	0085	-26	+14	+16	7,9	50	10	40	1500	2,23
82	T4	0088	0087	-30	+15	+17	17,4	32	12	48	1900	2,82