



REVISIONS

DOC. NO. SPC-F004 * Effective: 7/8/02 * DCP No: 1398

DCP #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
2096	A	RELEASED	JYC	7/20/10	JYC	7/20/10	JYC	7/20/10



Allowable ripple current vs ambient temperature

Ambient temp (°C)	Under 50	70	85	105
Multiplier	1.95	1.78	1.40	1.00

Frequency coefficient of allowable ripple current

Cap (µF)	Freq. (Hz)				
	60	120	500	1K	10K up
Under 100	0.70	1.00	1.30	1.40	1.50
100 to 1000	0.75	1.00	1.20	1.30	1.35
1000 up above	0.80	1.00	1.10	1.12	1.15

FEATURE:

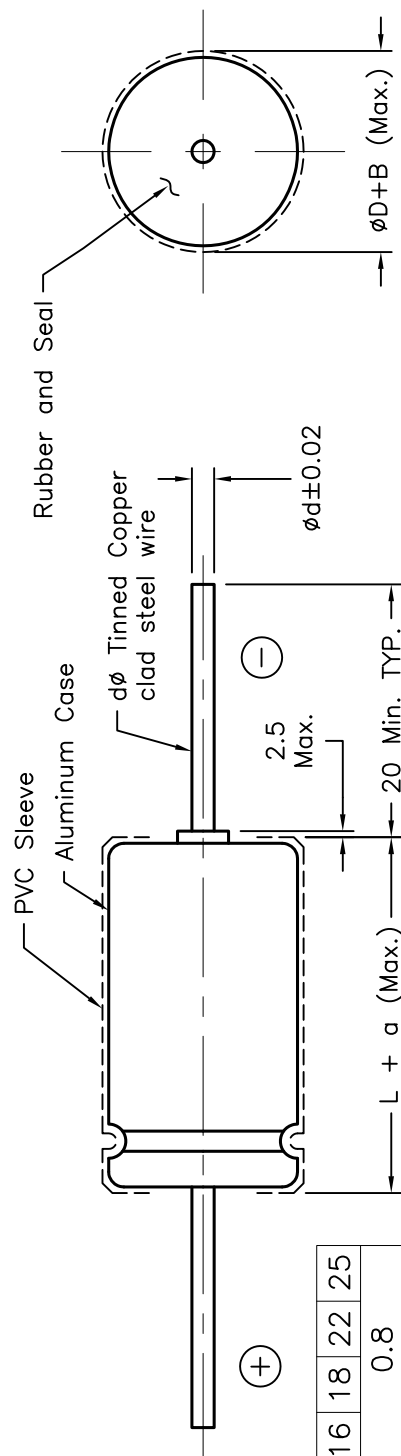
- 105°C, 1,000 hours assured

Item	Characteristic																																													
Operating Temperature Range	-40°C ~ +105°C																																													
Capacitance Tolerance	±10%, ±20% (at 20°C, 120 Hz)																																													
Leakage Current	I = 0.02CV or 3 µA whichever is greater (after 2 minutes applying the rated DC working voltage at 20°C) where: C = rated capacitance in µF V = rated DC working voltage in V																																													
Dissipation Factor (Tan δ) (At 20°C, 120 Hz)	<table border="1"> <thead> <tr> <th>Rated Voltage (V)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>100</th> </tr> </thead> <tbody> <tr> <td>Tan δ</td> <td>0.23</td> <td>0.20</td> <td>0.17</td> <td>0.15</td> <td>0.12</td> <td>0.10</td> <td>0.09</td> <td>0.08</td> </tr> </tbody> </table> <p>For capacitors whose capacitance exceeds 1,000µF, the specification of Tan δ is increased by 0.02 for every addition of 1,000µF.</p>	Rated Voltage (V)	6.3	10	16	25	35	50	63	100	Tan δ	0.23	0.20	0.17	0.15	0.12	0.10	0.09	0.08																											
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Load Life	<p>After 1000 hours application of rated voltage at 105°C, capacitors meet the characteristics requirements listed at right.</p> <table border="1"> <tbody> <tr> <td>Leakage Current</td> <td>Initial specified value or less</td> </tr> <tr> <td>Dissipation Factor</td> <td>Within 200% of specified value.</td> </tr> <tr> <td>Capacitance Change</td> <td>Within ±20% or less of initial value</td> </tr> </tbody> </table>	Leakage Current	Initial specified value or less	Dissipation Factor	Within 200% of specified value.	Capacitance Change	Within ±20% or less of initial value																																							
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Shelf Life	After leaving capacitors under no load at 105°C for 1000 hours and applying voltage they meet the specified value for load life characteristics listed above.																																													
Marking	Printed with white color letter on black sleeve.																																													
Applicable Standards	Satisfies characteristics W of JIS C5101-4.																																													

SPC-F004.DWG

TOLERANCES: UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.	DRAWN BY:	DATE:	DRAWING TITLE:			
	Jerrold Chen	7/20/10	Axial Aluminum Electrolytic Capacitors			
	CHECKED BY:	DATE:	SIZE	DWG. NO.	ELECTRONIC FILE	REV
	Jerrold Chen	7/20/10	A	TA-1232	TA-1232.DWG	A
	APPROVED BY:	DATE:	SCALE: NTS		U.O.M.: Millimeters	SHEET: 1 OF 2
	Jerrold Chen	7/20/10				

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øD	5	6	6.3	8	10	13	16	18	22	25
ød	0.8									
a	1.5					2				
B	0.5					1				

Multicomp Mfr Part #	Capacitance	Working Voltage	Diameter	Length
	µF	VDC	mm	mm
MCTG010M1HB-0512P	1	50	5	12
MCTG100M1EB-0512P	10	25	5	12
MCTG100M1HB-0613P	10	50	5	12
MCTG100M1JB-0613P	10	63	6.3	13
MCTG100M1VB-0512P	10	35	5	12
MCTG100M2AB-0613P	10	100	6.3	13
MCTG101M1AB-0613P	100	10	6.3	13
MCTG101M1CB-0613P	100	16	6.3	13
MCTG101M1EB-0813P	100	25	8	13
MCTG101M1HB-1017P	100	50	10	17
MCTG101M1JB-1017P	100	63	10	17
MCTG101M1VB-0816P	100	35	8	16
MCTG101M2AB-1322P	100	100	13	22
MCTG102M1AB-1017P	1000	10	10	17
MCTG102M1CB-1021P	1000	16	10	21
MCTG102M1EB-1322P	1000	25	13	22
MCTG102M1HB-1633P	1000	50	16	33
MCTG102M1JB-1633P	1000	63	16	36
MCTG102M1VB-1327P	1000	35	13	27
MCTG220M1EB-0512P	22	25	5	12
MCTG220M1HB-0613P	22	50	6.3	13
MCTG220M1JB-0613P	22	63	6.3	13
MCTG220M1VB-0613P	22	35	6.3	13
MCTG220M2AB-0816P	22	100	8	16
MCTG221M1EB-0816P	220	25	8	16
MCTG221M1HB-1021P	220	50	10	21
MCTG221M1JB-1322P	220	63	13	22
MCTG221M1VB-1017P	220	35	10	17
MCTG222M1CB-1324P	2200	16	13	24
MCTG222M1EB-1628P	2200	25	16	28
MCTG222M1JB-2043P	2200	63	22	43
MCTG222M1VB-1636P	2200	35	16	33
MCTG2R2M1HB-0512P	2.2	50	5	12
MCTG331M1HB-1322P	330	50	13	22
MCTG470M1AB-0512P	47	10	5	12
MCTG470M1CB-0613P	47	16	6.3	13
MCTG470M1EB-0613P	47	25	6.3	13
MCTG470M1HB-0813P	47	50	8	13
MCTG470M1JB-0816P	47	63	8	16
MCTG470M2AB-1021P	47	100	10	21
MCTG471M1AB-0816P	470	10	8	16
MCTG471M1CB-0816P	470	16	10	17
MCTG471M1EB-1021P	470	25	10	21
MCTG471M1HB-1322P	470	50	13	11
MCTG471M1JB-1327P	470	63	13	27
MCTG471M1VB-1322P	470	35	13	22
MCTG472M1CB-1633P	4700	16	16	33
MCTG472M1EB-1836P	4700	25	18	36
MCTG472M1VB-2243P	4700	35	22	43
MCTG4R7M1HB-0512P	4.7	50	5	12

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SIZE DWG. NO.

A

TA-1232

ELECTRONIC FILE

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REV

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