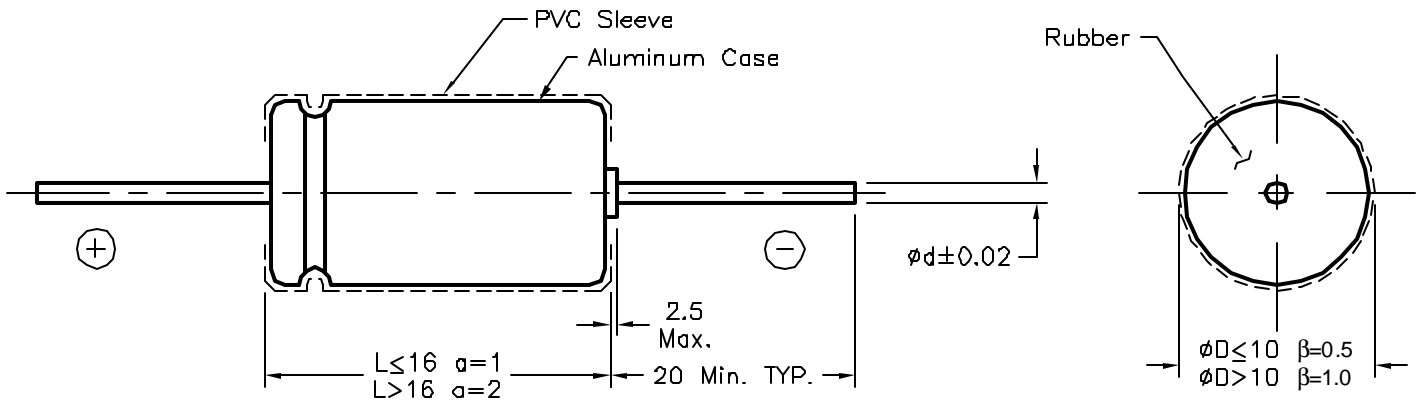
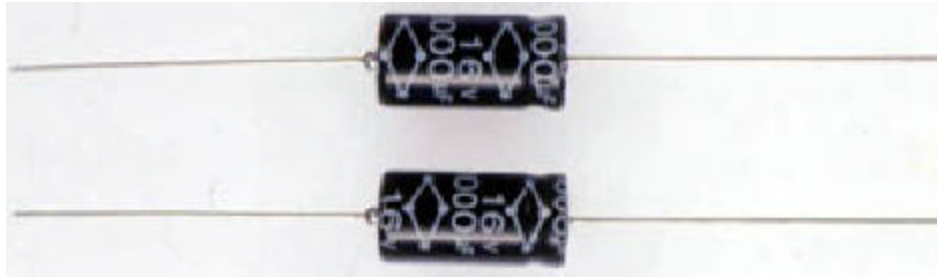


DCP #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
1890	A	RELEASED	JN	08/26/08	JWM	08/26/08	JWM	08/26/08


Features:

- For General Purpose
- Wide CV Valve Range
- Safely vent construction product, AX series are guaranteed 2,000 hours at 105°C

ϕD (+0.5 max.)	6.3	8	10	13	16	18
ϕd (± 0.02)	0.6	0.6	0.6	0.6	0.8	0.8

SPC-F004.DWG

TOLERANCES: UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.	DRAWN BY:	DATE:	DRAWING TITLE:			
	Jason Nash	09/26/08	Aluminum Electrolytic Capacitor; Capacitor, General Purpose			
	CHECKED BY:	DATE:	SIZE	DWG. NO.	ELECTRONIC FILE	REV
	JWM	09/26/08	A	TA-945	TA-945.DWG	A
APPROVED BY:	DATE:	SCALE: NTS		U.O.M.: Millimeters		
JWM	09/26/08			SHEET: 1 OF 5		

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CHARACTERISTICS

ITEM	PERFORMANCE																																																																					
Operating Temperature Range	-40°C to 105°C	-25°C to 105°C																																																																				
Rated Working Voltage Range	6.3 - 100 VDC	160 - 450 VDC																																																																				
Nominal Capacitance Range	0.1 - 15000 μ F	0.47 - 330 μ F																																																																				
Capacitance Tolerance	$\pm 20\%$ (at +20°C, 120 Hz)																																																																					
Leakage Current	$I \leq 0.01CV$ or 3 μ A max	$I \leq 0.03CV + 20 \mu$ A Max.																																																																				
	whichever is greater after 3 minutes. where: I = Leakage Current in μ A C = Rated capacitance in μ F V = Working voltage in V																																																																					
Dissipation Factor (Tan δ) (120 Hz \ +20°C)	<table border="1"> <thead> <tr> <th>Working Voltage</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> <th>160</th> <th>200</th> <th>250</th> <th>350</th> <th>400</th> <th>450</th> </tr> </thead> <tbody> <tr> <td>Tan δ Max.</td> <td>0.22</td> <td>0.19</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.10</td> <td>0.07</td> <td>0.15</td> <td>0.15</td> <td>0.15</td> <td>0.20</td> <td>0.24</td> <td>0.24</td> </tr> </tbody> </table>														Working Voltage	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450	Tan δ Max.	0.22	0.19	0.16	0.14	0.12	0.10	0.10	0.07	0.15	0.15	0.15	0.20	0.24	0.24																										
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For capacitors whose capacitance exceeds 1,000 μ F, the specification of Tan δ is increased by 0.02 for every addition of 1,000 μ F.																																																																						
Maximum Permissible Ripple Current	Refer to standard products table (120 Hz, +105°). Correction factor for frequency.																																																																					
	<table border="1"> <thead> <tr> <th colspan="2" rowspan="2">W.V. (VDC) \ Freq. (Hz)</th> <th colspan="5">Freq. (Hz)</th> </tr> <tr> <th>60</th> <th>120</th> <th>1K</th> <th>10K</th> <th>100K</th> </tr> </thead> <tbody> <tr> <td rowspan="3">6.3-50</td> <td>0.1 - 330</td> <td>0.85</td> <td>1</td> <td>1.30</td> <td>1.40</td> <td>1.55</td> </tr> <tr> <td>470 - 3300</td> <td>0.95</td> <td>1</td> <td>1.15</td> <td>1.20</td> <td>1.25</td> </tr> <tr> <td>≥ 4700</td> <td>0.95</td> <td>1</td> <td>1.10</td> <td>1.20</td> <td>1.20</td> </tr> <tr> <td rowspan="3">63-100</td> <td>0.47 - 33</td> <td>0.75</td> <td>1</td> <td>1.55</td> <td>1.65</td> <td>1.80</td> </tr> <tr> <td>47 - 220</td> <td>0.75</td> <td>1</td> <td>1.40</td> <td>1.60</td> <td>1.65</td> </tr> <tr> <td>≥ 330</td> <td>0.80</td> <td>1</td> <td>1.30</td> <td>1.35</td> <td>1.40</td> </tr> <tr> <td>≥ 160</td> <td>1 - 220</td> <td>0.70</td> <td>1</td> <td>1.30</td> <td>1.70</td> <td>1.70</td> </tr> </tbody> </table>														W.V. (VDC) \ Freq. (Hz)		Freq. (Hz)					60	120	1K	10K	100K	6.3-50	0.1 - 330	0.85	1	1.30	1.40	1.55	470 - 3300	0.95	1	1.15	1.20	1.25	≥ 4700	0.95	1	1.10	1.20	1.20	63-100	0.47 - 33	0.75	1	1.55	1.65	1.80	47 - 220	0.75	1	1.40	1.60	1.65	≥ 330	0.80	1	1.30	1.35	1.40	≥ 160	1 - 220	0.70	1	1.30	1.70
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Low Temperature Characteristics (stability at 120 Hz)	For capacitance value > 1000 μ F: Add 0.5 per 1000 μ F for -25°C/+25°C. Add 1.0 per 1000 μ F for -40°C/+20°C.																																																																					
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-40°C/+20°C	8	6	4	3	3	3	3	3																																																														
High Temperature Loading	After 2000 hrs application of DC rated working voltage at +105°C, the capacitor shall meet the following limits: Post test requirements at +20°C.																																																																					
	<table border="1"> <tbody> <tr> <td>Leakage Current</td> <td colspan="13">\leq the initial specified value</td> </tr> <tr> <td>Capacitance change</td> <td colspan="13">$\leq \pm 20\%$ of initial specified value</td> </tr> <tr> <td>Dissipation Factor (Tan δ)</td> <td colspan="13">$\leq 200\%$ of initial specified value</td> </tr> </tbody> </table>														Leakage Current	\leq the initial specified value													Capacitance change	$\leq \pm 20\%$ of initial specified value													Dissipation Factor (Tan δ)	$\leq 200\%$ of initial specified value																										
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Shelf Life	After storage for 500 hours at 105°C with no voltage applied. Post test requirements at +20°C same limits for high temperature loading.																																																																					



RoHS
Compliant

Mfg. P/N	Working Voltage (WVDC)	Capacitance (pF)	Case Size	
			Body diameter	Body Length
MCAX150V106K10X21	150	10	10	21
MCAX150V506M13X27		50	13	27
MCAX16V106K6X13	16	10	6	13
MCAX25V106K6X13	25	10	6	13
MCAX25V106M6X13		10	6	13
MCAX25V107K8X13		100	8	13
MCAX25V107M8X13		100	8	13
MCAX25V107M8X16		100	8	16
MCAX25V108M13X22		1,000	13	22
MCAX25V207K8X16		200	8	16
MCAX25V226M6X13		22	6	13
MCAX25V227M8X16		220	8	16
MCAX25V256K6X13		25	6	13
MCAX25V256M6X13		25	6	13
MCAX25V257M8X16		250	8	16
MCAX25V476M6X13		47	6	13
MCAX25V477M10X21		470	10	21
MCAX25V506M6X13		50	6	13
MCAX25V507M10X21		500	10	21

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SIZE DWG. NO.

A

TA-945

ELECTRONIC FILE

TA-945.DWG

REV

A

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

SCALE: NTS

U.O.M.: Millimeters

SHEET: 3 OF 5

MCAX350V106M10X21	350	10	10	21
MCAX350V107M18X36		100	18	36
MCAX35V106M6X13	35	10	6	13
MCAX35V107M8X16		100	8	16
MCAX35V226M6X13		22	6	13
MCAX35V476K6X13		47	6	13
MCAX40V108M16X32	40	1,000	16	32
MCAX40V227M10X21		220	10	21
MCAX40V228M18X36		2,200	18	36
MCAX40V476M8X16		47	8	16
MCAX40V478M20X36		4,700	20	36
MCAX40V687M16X28		680	16	28
MCAX450V106M13X25	450	10	13	25
MCAX450V205M10X21		2	10	21
MCAX450V206M13X32		20	13	32
MCAX450V226M16X32		22	16	32
MCAX450V406M18X36		40	18	36
MCAX450V805M13X25		8	13	25
MCAX50V105K6X13	50	1	6	13
MCAX50V106M6X13		10	6	13
MCAX50V107K8X16		100	8	16

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U.O.M.: Millimeters

SHEET: 4 OF 5

MCAX50V108M16X32	50	1,000	16	32
MCAX50V108M16X38		1,000	16	38
MCAX50V156K6X13		15	6	13
MCAX50V157M10X21		150	10	21
MCAX50V205K6X13		2	6	13
MCAX50V206K6X13		20	6	13
MCAX50V226M6X13		22	6	13
MCAX50V256M6X13		25	6	13
MCAX50V476M8X16		47	8	16
MCAX50V508K22X42		5,000	22	42
MCAX63V105M6X13	63	1	6	13
MCAX63V106M6X13		10	6	13
MCAX63V107M10X21		100	10	21
MCAX63V108M16X36		1,000	16	36
MCAX63V225M6X13		2.2	6	13
MCAX63V226M6X13		22	6	13
MCAX63V227M13X22		220	13	22
MCAX63V228M20X36		2,200	20	36
MCAX63V337M13X27		330	13	27
MCAX63V476M8X16		47	8	16

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