# T396 & T398 UltraDip III (3 Leaded)



#### **Overview**

The KEMET UltraDip III capacitors offer the advantages of solid tantalum construction and a "fail-safe" insertion mechanism. The three-leaded design (the anode is in the center) enables operators to insert the capacitors into printed circuit boards correctly without having to visually determine polarity. This time-saving device also eliminates board damage that may result from incorrect insertion. The UltraDip III features a capacitance range of 0.1 to 680  $\mu F$  at 3 to 50 VDC. These miniature, dipped solid tantalum capacitors are encased in a tough plastic barrier coating

that maintains the precise lead wire spacing within ±0.015 inch. The gold color epoxy permits laser markings with outstanding permanency and legibility. All case sizes are printed with capacitance, voltage and vendor identification. The UltraDip III exhibits low DC leakage, ESR and impedance and mainttian excellent temperature stability. These capacitors may be ordered with precut leads (see drawing for lengths) or in KEMET capacitor ARIS packaging (leads taped and on reels) for high speed automatic insertion equipment.

#### **Benefits**

- Taped and reeled per EIA Specification RS-468
- Laser-marked case
- Capacitance values of 0.1 680 μF
- Tolerances of ±20% and ±10% (special order only)
- Voltage rating of 3 50 VDC
- Case sizes: A, B, C, D, E, F, G, H, J, K, L, M

#### **Applications**

Typical applications include filtering, bypassing, coupling, blocking, and RC timing circuits or other applications that can benefit from compactness.



# **Ordering Information**

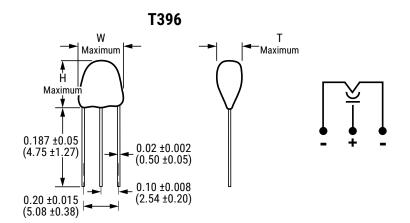
Т	39X	Α	105	M	035	Α	S	
Capacitor Class	Series	Case Size	Capacitance Code (pF)	Capacitance Tolerance	Rated Voltage (VDC)	Failure Rate	Termination Finish	Packaging
T = Tantalum	T396 Straight Leads T398 Lead Standoff	A, B, C, D, E, F, G, H, J, K, L, M	First two digits represent significant figures. Third digit specifies number of zeros to follow.	M = ±20% K = ±10% (Special order only)	003 = 3 006 = 6 010 = 10 016 = 16 020 = 20 025 = 25 035 = 35 050 = 50	Not Applicable	S = Standard T = 100% Sn (tin)	Blank = Bulk 7301 = Tape & Reel 7305 = Ammo

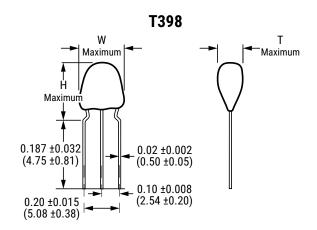


#### **Performance Characteristics**

Item	Performance Characteristics
Operating Temperature	-55°C to 125°C
Rated Capacitance Range	0.1 - 680 μF at 120 Hz/25°C
Capacitance Tolerance	M tolerance ±20% (standard), K tolerance ±10% (special order only)
Rated Voltage Range	3 – 50 V
DF (120 Hz at 25°C)	Refer to Part Number Electrical Specification Table
Leakage Current	Refer to Part Number Electrical Specification Table at rated voltage up to 85°C

## **Dimensions - Millimeters (Inches)**





Case	Вс	Both		T398
Size	W Width	T Thickness	H Height	H Height
Α	0.280 (7.1)	0.190 (4.8)	0.310 (7.9)	0.355 (9.0)
В	0.280 (7.1)	0.190 (4.8)	0.320 (8.1)	0.365 (9.3)
С	0.280 (7.1)	0.200 (5.1)	0.360 (9.1)	0.390 (9.9)
D	0.280 (7.1)	0.200 (5.1)	0.370 (9.4)	0.390 (9.9)
E	0.280 (7.1)	0.230 (5.8)	0.380 (9.7)	0.415 (10.5)
F	0.280 (7.1)	0.240 (6.1)	0.410 (10.4)	0.430 (10.9)
G	0.280 (7.1)	0.250 (6.3)	0.420 (10.7)	0.440 (11.2)
Н	0.280 (7.1)	0.270 (6.9)	0.420 (10.7)	0.440 (11.2)
J	0.300 (7.6)	0.300 (7.6)	0.460 (11.7)	0.480 (12.2)
K	0.340 (8.6)	0.340 (8.6)	0.500 (12.7)	0.500 (12.7)
L	0.340 (8.6)	0.340 (8.6)	0.560 (14.2)	0.560 (14.2)
М	0.360 (9.1)	0.360 (9.1)	0.620 (15.7)	0.620 (15.7)



**Table 1 - Ratings and Part Number Reference** 

Rated Voltage	Rated Capacitance	Case Code Case Size	KEMET Part Number	DC Leakage	DF % at 25°C
(V) 85°C	μF			μΑ at 25°C Maximum/5 Minutes	120 Hz Maximum
3	4.7	A	T39(1)A475(2)003A(3)	0.5	5
3	6.8	Α	T39(1)A685(2)003A(3)	0.5	5
3	10.0	A	T39(1)A106(2)003A(3)	0.5	6
3	15.0	В	T39(1)B156(2)003A(3)	0.5	6
3	22.0	С	T39(1)C226(2)003A(3)	0.5	6
3 3	33.0	D E	T39(1)D336(2)003A(3)	0.8	6 6
3	47.0 68.0	F	T39(1)E476(2)003A(3)	1.1 1.6	6
3	100.0	G	T39(1)F686(2)003A(3) T39(1)G107(2)003A(3)	2.4	8
3	150.0	Н	T39(1)H157(2)003A(3)	3.6	8
3	220.0	J	T39(1)J227(2)003A(3)	5.3	8
3	330.0	ĸ	T39(1)K337(2)003A(3)	7.9	8
3	470.0	Ľ	T39(1)L477(2)003A(3)	10.0	9
3	680.0	M	T39(1)M687(2)003A(3)	10.0	9
6	3.3	Α	T39(1)A335(2)006A(3)	0.5	5
6	4.7	Α	T39(1)A475(2)006A(3)	0.5	5
6	6.8	Α	T39(1)A685(2)006A(3)	0.5	5
6	10.0	В	T39(1)B106(2)006A(3)	0.5	6
6	15.0	С	T39(1)C156(2)006A(3)	0.7	6
6	22.0	D	T39(1)D226(2)006A(3)	1.1	6
6	33.0	E	T39(1)E336(2)006A(3)	1.6	6
6	47.0	F	T39(1)F476(2)006A(3)	2.3	6
6	68.0	G	T39(1)G686(2)006A(3)	3.3	6
6	100.0	H	T39(1)H107(2)006A(3)	4.8	8
6	150.0	J	T39(1)J157(2)006A(3)	7.2	8
6	220.0	K	T39(1)K227(2)006A(3)	10.0	8
6	330.0	L	T39(1)L337(2)006A(3)	10.0	8 5
10 10	2.2 3.3	A A	T39(1)A225(2)010A(3)	0.5 0.5	5 5
10	4.7	A	T39(1)A335(2)010A(3) T39(1)A475(2)010A(3)	0.5	5 5
10	6.8	B	T39(1)B685(2)010A(3)	0.5	5
10	10.0	C	T39(1)C106(2)010A(3)	0.8	6
10	15.0	E	T39(1)E156(2)010A(3)	1.2	6
10	22.0	E	T39(1)E226(2)010A(3)	1.8	6
10	33.0	F	T39(1)F336(2)010A(3)	2.6	6
10	47.0	Н	T39(1)H476(2)010A(3)	3.8	6
10	68.0	Н	T39(1)H686(2)010A(3)	5.4	6
10	100.0	J	T39(1)J107(2)010A(3)	8.0	8
10	150.0	K	T39(1)K157(2)010A(3)	10.0	8
10	220.0	L	T39(1)L227(2)010A(3)	10.0	8
16	1.5	Α	T39(1)A155(2)016A(3)	0.5	5
16	2.2	Α	T39(1)A225(2)016A(3)	0.5	5
16	3.3	A	T39(1)A335(2)016A(3)	0.5	5
16	4.7	В	T39(1)B475(2)010A(3)	0.6	5
16	6.8	С	T39(1)C685(2)016A(3)	0.9	5
(V) 85°C	μF	Case Code	KEMET Part Number	μΑ at 25°C Maximum/5 Minutes	120 Hz Maximum
Rated Voltage	Rated Capacitance	Case Size	ALINET I dictionisci	DC Leakage	DF % at 25°C

<sup>(1)</sup> To complete KEMET Part Number, insert Series Designation as follows: "6" - T396, "8" - T398.

<sup>(2)</sup> To complete KEMET or military part number, insert M - 20%, K - ±10%. Designates Capacitance tolerance.

<sup>(3)</sup> To complete KEMET part number, insert S = Standard coated or T=100% Sn (tin). Designates termination finish.

 $Higher \ voltage/tighter \ capacitance \ tolerance \ products \ may \ be \ substituted \ for \ an \ order \ within \ the \ same \ case \ size \ at \ KEMET's \ option.$ 



**Table 1 - Ratings and Part Number Reference cont.** 

Rated Voltage	Rated Capacitance	Case Code Case Size	KEMET Part Number	DC Leakage	DF % at 25°C
(V) 85°C	μF			μΑ at 25°C Maximum/5 Minutes	120 Hz Maximum
16	10.0	E	T39(1)E106(2)016A(3)	1.3	6
16	15.0	E	T39(1)E156(2)016A(3)	1.8	6
16	22.0	F	T39(1)F226(2)016A(3)	2.6	6
16	33.0	н	T39(1)H336(2)016A(3)	4.0	6
16	47.0	J	T39(1)J476(2)016A(3)	5.6	6
16	68.0	K	T39(1)K686(2)016A(3)	8.2	6
16	100.0	L	T39(1)L107(2)016A(3)	10.0	8
16	150.0	М	T39(1)M157(2)016A(3)	10.0	8
20	1.0	A	T39(1)A105(2)020A(3)	0.5	3
20	1.5	A	T39(1)A155(2)020A(3)	0.5	5
20	2.2	A	T39(1)A225(2)020A(3)	0.5	5
20	3.3	В	T39(1)B335(2)020A(3)	0.5	5
20	4.7	C	T39(1)C475(2)020A(3)	0.8	5
20	6.8	D E	T39(1)D685(2)020A(3)	1.1	5
20 20	10.0	E F	T39(1)E106(2)020A(3)	1.6 2.4	6
20	15.0 22.0	G	T39(1)F156(2)020A(3)	3.5	6
20	33.0	J	T39(1)G226(2)020A(3)	5.3	6
20	47.0	K K	T39(1)J336(2)020A(3) T39(1)K476(2)020A(3)	7.5	6
20	68.0	l K	T39(1)L686(2)020A(3)	10.0	6
20	100.0	M	T39(1)M107(2)020A(3)	10.0	8
25	1.0	A A	T39(1)A105(2)025A(3)	0.5	3
25	1.5	Â	T39(1)A155(2)025A(3)	0.5	5
25	2.2	В	T39(1)B225(2)025A(3)	0.5	5
25	3.3	B	T39(1)B335(2)025A(3)	0.7	5
25	4.7	C	T39(1)C475(2)025A(3)	0.9	5
25	6.8	Ē	T39(1)E685(2)025A(3)	1.4	5
25	10.0	E	T39(1)E106(2)025A(3)	2.0	6
25	15.0	G	T39(1)G156(2)025A(3)	3.0	6
25	22.0	Н	T39(1)H226(2)025A(3)	4.4	6
25	33.0	J	T39(1)J336(2)025A(3)	6.6	6
25	47.0	K	T39(1)K476(2)025A(3)	9.4	6
25	68.0	L	T39(1)L686(2)025A(3)	10.0	6
35	0.10	A	T39(1)A104(2)035A(3)	0.5	3
35	0.15	A	T39(1)A154(2)035A(3)	0.5	3
35	0.22	A	T39(1)A224(2)035A(3)	0.5	3
35	0.33	A	T39(1)A334(2)035A(3)	0.5	3
35	0.47	A	T39(1)A474(2)035A(3)	0.5	3
35	0.68	A	T39(1)A684(2)035A(3)	0.5	3
35 35	1.0 1.5	A B	T39(1)A105(2)035A(3)	0.5 0.5	3 5
35 35	2.2	C	T39(1)B155(2)035A(3) T39(1)C225(2)035A(3)	0.5	5 5
35 35	3.3		T39(1)D335(2)035A(3)	0.6	5
35 35	3.3 4.7	E E	T39(1)E475(2)035A(3)	1.3	5
35	6.8	F I	T39(1)F685(2)035A(3)	1.9	5
(V) 85°C	μF	Case Code		μA at 25°C Maximum/5 Minutes	120 Hz Maximum
Rated Voltage	Rated Capacitance	Case Size	KEMET Part Number	DC Leakage	DF % at 25°C

<sup>(1)</sup> To complete KEMET Part Number, insert Series Designation as follows: "6" - T396, "8" - T398.

<sup>(2)</sup> To complete KEMET or military part number, insert M - 20%, K - ±10%. Designates Capacitance tolerance.

<sup>(3)</sup> To complete KEMET part number, insert S = Standard coated or T=100% Sn (tin). Designates termination finish.

Higher voltage/tighter capacitance tolerance products may be substitued for an order within the same case size at KEMET's option.



**Table 1 - Ratings and Part Number Reference cont.** 

Rated Voltage	Rated Capacitance	Case Code Case Size	KEMET Part Number	DC Leakage	DF % at 25°C
(V) 85°C	μF			μA at 25°C Maximum/5 Minutes	120 Hz Maximum
35	10.0	G	T39(1)G106(2)035A(3)	2.8	6
35	15.0	J	T39(1)J156(2)035A(3)	4.2	6
35	22.0	K	T39(1)K226(2)035A(3)	6.2	6
35	33.0	L	T39(1)L336(2)035A(3)	9.2	6
35	47.0	М	T39(1)M476(2)035A(3)	10.0	6
50	0.10	Α	T39(1)A104(2)050A(3)	0.5	3
50	0.15	Α	T39(1)A154(2)050A(3)	0.5	3
50	0.22	Α	T39(1)A224(2)050A(3)	0.5	3
50	0.33	Α	T39(1)A334(2)050A(3)	0.5	3
50	0.47	В	T39(1)B474(2)050A(3)	0.5	3
50	0.68	В	T39(1)B684(2)050A(3)	0.5	3
50	1.0	В	T39(1)B105(2)050A(3)	0.5	3
50	1.5	E E	T39(1(E155(2)050A(3)	0.6	5
50	2.2	E	T39(1)E225(2)050A(3)	0.9	5
50	3.3	F	T39(1)F335(2)050A(3)	1.3	5
50	4.7	G	T39(1)G475(2)050A(3)	1.9	5
50	6.8	J	T39(1)J685(2)050A(3)	2.7	5
50	10.0	К	T39(1)K106(2)050A(3)	4.0	6
50	15.0	L	T39(1)L156(2)050A(3)	6.0	6
50	22.0	М	T39(1)M226(2)050A(3)	8.8	6
(V) 85°C	μF	Case Code	KEMET Part Number	μΑ at 25°C Maximum/5 Minutes	120 Hz Maximum
Rated Voltage	Rated Capacitance	Case Size	Case Size REMEI Part Number	DC Leakage	DF % at 25°C

<sup>(1)</sup> To complete KEMET Part Number, insert Series Designation as follows: "6" - T396, "8" - T398.

<sup>(2)</sup> To complete KEMET or military part number, insert M - 20%, K - ±10%. Designates Capacitance tolerance.

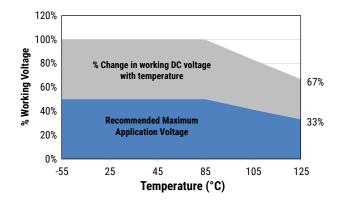
<sup>(3)</sup> To complete KEMET part number, insert S = Standard coated or T=100% Sn (tin). Designates termination finish.

Higher voltage/tighter capacitance tolerance products may be substitued for an order within the same case size at KEMET's option.



## **Recommended Voltage Derating Guidelines**

	-55°C to 85°C	85°C to 125°C
% Change in working DC voltage with temperature	V <sub>R</sub>	66% of V <sub>R</sub>
Recommended Maximum Application Voltage	50% of V <sub>R</sub>	33% of V <sub>R</sub>



## **Ripple Current/Ripple Voltage**

Permissible AC ripple voltage and current are related to equivalent series resistance (ESR) and the power dissipation capabilities of the device. Permissible AC ripple voltage that may be applied is limited by following criteria:

- 1. Dissipated power must not exceed the limits specified for the Series.
- 2. The positive peak AC voltage plus the DC bias voltage, if any, must not exceed the DC voltage rating of the capacitor.
- The negative peak AC voltage in combination with bias voltage, if any, must not exceed the allowable limits specified for reverse voltage.

Thermal capacities for the various case sizes have been determined empirically and are listed below. The "ripple voltage" permissible may be calculated from the impedance and ESR data shown in the respective product section.

Temperature Compensation Multipliers for Maximum Power Dissipation				
T ≤ 25°C	T ≤ 85°C	T ≤ 125°C		
1.00 0.90 0.40				

T= Environmental Temperature

The maximum power dissipation rating must be reduced with increasing environmental operating temperatures. Refer to the Temperature Compensation Multiplier table for details.

Case Size	Maximum Power Dissipation (Pmax) Watts at 25°C
А	0.040
В	0.050
С	0.060
D	0.065
E	0.070
F	0.080
G	0.090
Н	0.100
J	0.110
К	0.120
L	0.130
М	0.140

Using the Pmax of the device, the maximum allowable rms ripple current or voltage may be determined.

 $I(max) = \sqrt{Pmax/R}$  $E(max) = Z \sqrt{Pmax/R}$ 

I = rms ripple current (amperes)

E = rms ripple voltage (volts)

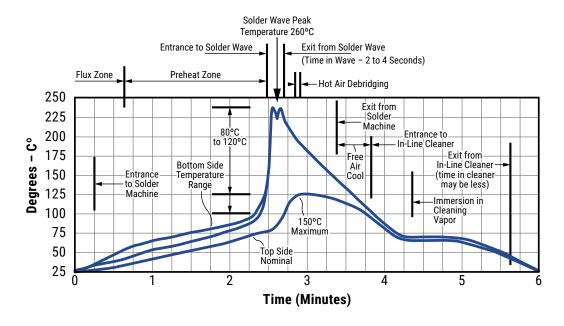
Pmax = maximum power dissipation (watts)

R = ESR at specified frequency (ohms)

Z = Impedance at specified frequency (ohms)



#### **Optimum Solder Wave Profile**

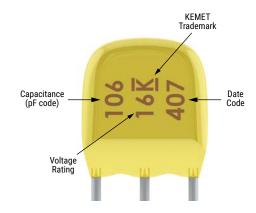


## **Mounting**

All encased capacitors will pass the Resistance to Soldering Heat Test of MIL-STD-202, Method 210, Condition C. This test simulates wave solder of topside board mount product. This demonstration of resistance to solder heat is in accordance with what is believed to be the industry standard. More severe treatment must be considered reflective of an improper soldering process. The above figure is a recommended solder wave profile for both axial and radial leaded solid tantalum capacitors. Table 2 – Performance & Reliability: Test Methods and Conditions



#### **Capacitor Marking**



## **Storage**

Tantalum molded radial/axial capacitors should be stored in normal working environments. KEMET recommends that maximum storage temperature not exceed 40°C and maximum storage humidity not exceed 60°C RH. Storage at high temperature may cause a small, temporary increase in leakage current (measured under standard conditions), but the original value is usually restored within a few minutes after application of rated voltage. Storage at high humidity may increase capacitance and dissipation factor. Solderability will be degraded by exposure to high temperatures, high humidity, corrosive atmospheres, and long term storage. For optimized solderability capacitors stock should be used promptly, preferably within three years of receipt.

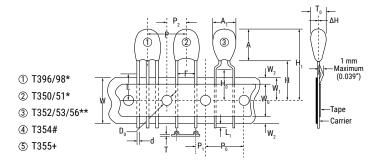
# **Tape & Reel Packaging Information**

## Table 2 - Packaging Quantity

Case Size	Standard Bulk Quantity	Standard Reel Quantity	Reel C-Spec	Ammo Pack Quantity
A/B	1,000	1,500	C-7301/7303	2,000
С	500	1,500	C-7301/7303	2,000
D/E/F	500	1,000	C-7301/7303	1,500
G	500	1,000	C-7301/7303	2,000
Н	500	800	C-7301/7303	2,000
J	250	800	C-7301/7303	1,600
K	250	500	C-7301/7303	800
L/M	250	500	C-7301/7303	500



## Figure 1



Dimension	Symbol	Nominal mm (inch)		Tolerance mm (inch)	
Body Height (1)	Α	17.0 (	0.67)	Maximum	
Body Width (1)	A <sub>1</sub>	10.2 (	0.40)	Maxii	mum
Sprocket Hole Diameter	D <sub>0</sub>	4.0 (0	.157)	±0.3 (±	0.012)
Lead Diameter	d	0.51 (0.020) o	r 0.64 (0.025)	±0.05 (±	±0.002)
Lead Center (4)	F		See Not	e Below	
Component Base to Tape Center (4)	Н	C-7301 16.0 (0.630)	C-7303 18.0 (0.709)	C-7301 ±0.5 (±0.02)	C-7303 Minimum
Lead Standoff Height	H <sub>o</sub>	C-7301 16.0 (0.630)	C-7303 18.0 (0.709)	C-7301 ±0.5 (±0.02)	C-7303 Minimum
Component Height Above Tape Center	H <sub>1</sub>	32.25 (1.270)		Maximum	
Component Alignment Front to Rear	ΔΗ	C		±2.0 (0.079)	
Cut Out Length	L	11.0 (0	0.433)	Maximum	
Lead Protrusion	L,	2.0 (0	.079)	Maximum	
Component Pitch (5)	Р	12.7 (0	0.500)	±1.0 (±0.039)	
Sprocket Hole Pitch (2)	P <sub>0</sub>	12.7 (0	0.500)	±0.03 (±0.012)	
Sprocket Hole Center to Lead Center (3) (4)	P <sub>1</sub>	See Not	e Below	±0.7 (±0.028)	
Sprocket Hole Center to Component Center (5)	P <sub>2</sub>		See Not	Note Below	
Body Thickness	T <sub>0</sub>	10.2 (0.400)		Maximum	
Total Tape Thickness	Т	0.7 (0.28)		±0.02 (±0.008)	
Carrier Tape Width	W	18.0 (0.709)		+1.0/-0.5 (+0.039/-0.020)	
Hold-Down Tape Width	W <sub>o</sub>	15 mm (0.561) or 6 mm (0.236)		15 mm (0.561) or 6 mm (0.236) +1.0/-0.8 (+0.039/-0.031	
Sprocket Hole Location	W <sub>1</sub>	9.0 (0	.354)	+0.075/-0.5 (+0.030/-0.020)	
Hold-Down Tape Location	W <sub>2</sub>	12.0 (0	).472)	Maximum	

#### Notes:

- (1) See Dimensions table for specific values per case size.
- (2) Cumulative pitch error ±1.0 mm (0.039) maximum in 20 consecutive sprocket hole locations.
  (3) Measured at bottom of standoff.
- (4) P, and F measured at egress from carrier tape.
- (5) P and P2 measured at egress from carrier tape.
- \* Lead spacings are 2.5 mm (0.098") center to center (T350 A-H)
- \*\*Lead spacings are 5.0 mm (0.197") center to center # Lead spacings are 6.35 mm (0.25") center to center + Lead spacings are 3.18 mm (0.125") center to center

F Dimensions:	P <sub>1</sub> Dimensions:
0.100" ±0.015	Lead Spacing
0.125" ±0.015	0.100" - 0.200 ±0.028"
0.200" ±0.015	0.125" - 0.187 ±0.028"
0.250" ±0.015"	0.200" - 0.150 ±0.028"
0.100" ±0.015 (3 leaded)	0.250" - 0.125 ±0.028"
	0.100" - 0.100 ±0.028" ( 3 leaded)



## **KEMET Electronics Corporation Sales Offices**

For a complete list of our global sales offices, please visit www.kemet.com/sales.

#### **Disclaimer**

All product specifications, statements, information and data (collectively, the "Information") in this datasheet are subject to change. The customer is responsible for checking and verifying the extent to which the Information contained in this publication is applicable to an order at the time the order is placed. All Information given herein is believed to be accurate and reliable, but it is presented without guarantee, warranty, or responsibility of any kind, expressed or implied.

Statements of suitability for certain applications are based on KEMET Electronics Corporation's ("KEMET") knowledge of typical operating conditions for such applications, but are not intended to constitute – and KEMET specifically disclaims – any warranty concerning suitability for a specific customer application or use. The Information is intended for use only by customers who have the requisite experience and capability to determine the correct products for their application. Any technical advice inferred from this Information or otherwise provided by KEMET with reference to the use of KEMET's products is given gratis, and KEMET assumes no obligation or liability for the advice given or results obtained.

Although KEMET designs and manufactures its products to the most stringent quality and safety standards, given the current state of the art, isolated component failures may still occur. Accordingly, customer applications which require a high degree of reliability or safety should employ suitable designs or other safeguards (such as installation of protective circuitry or redundancies) in order to ensure that the failure of an electrical component does not result in a risk of personal injury or property damage.

Although all product-related warnings, cautions and notes must be observed, the customer should not assume that all safety measures are indicted or that other measures may not be required.

# **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Kemet manufacturer:

Other Similar products are found below:

C0603C151K5GAC7867 C0805N332K1XSL7185 F461DO225F250L M39003/01-5168 M39003/09-3052 M39014/02-1238

ESK477M025AH1EA F161WP225K050V MMK10104K100A01L16.5TR18 MMK10473K250A01L4BULK PEH200YK4100MU2

PFR5222J100J11L4BULK PHE426HD7220JR06L2 R71PI36804030M ALC10A181DC550 ALC40A471DH450 ALS30A223DE040

ALS30A332LF400 EFF(03)-240X240 EFR(03)-240X240 EFX(02)-240X240T0800 EFX(05)-240X240 C0603X152K5RAC7867

C0805C105K4RAC7800 C1206C106K3PAC7800-CUT-TAP C20ALGR5680AASK C20AQGR5680AASK C440C224M1U5CA

C44AMFP4600ZA0J C44AMFP5100ZD0J C44PLGR6300ZASJ C4AEGBW5750A3MJ C4AEOBU4500A11J C4ATHBW4900A3LJ

C4BSMBX4500ZBNJ C4BSPBX4100ZAJJ C4DEHPQ6220A8TK SBC2-6R8-242 FCS0V474ZFTBR24 T110B156J020AS

T110B565K035AT T140D108K006AT T322C335K035AT T322D106K035AT T322D336M015AT T322E226M025AT

T350C225K035ATTR T356A224M050AT7301 T368C107K010AS T491B335K035AT