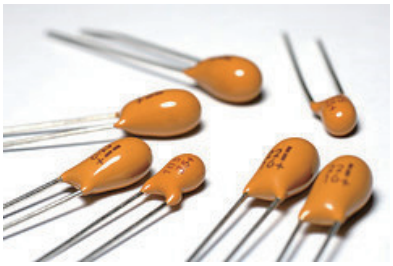
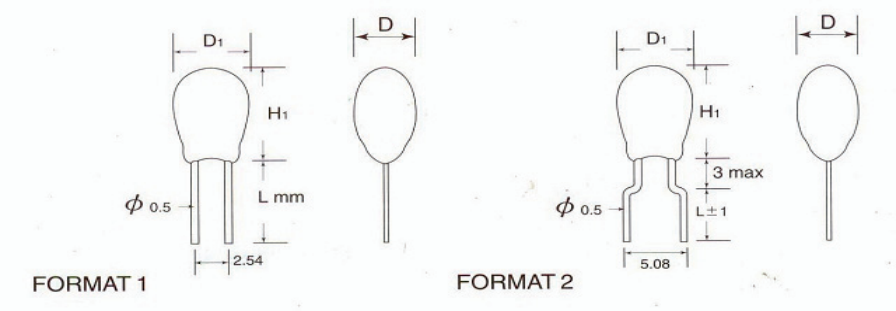
Features：

Lead-Free
Specially designed of general purpose.
Highly reliable resin dipped type.
Excellent frequency and temperature characteristics.
Non-flammable epoxy resin



<table>
<tr><th>Item</th><th>Performance Characteristics</th></tr>
<tr><td>使用溫度範圍
Operating Temperature Range</td><td>-55 to +125℃ (>85℃ with rated voltage derating)</td></tr>
<tr><td>額定電壓範圍
Rated Working Voltage Range</td><td>6.3 to 50 V DC</td></tr>
<tr><td>Nominal Capacitance Range</td><td>0.1 to 330 uF</td></tr>
<tr><td>靜電容量容許差
Capacitance Tolerance</td><td>±20% (±10% is available)(120Hz, +20℃)</td></tr>
<tr><td>洩漏電流
Leakage Current</td><td>Not more than 0.008CV[uA] or 0.5uA whichever is greater</td></tr>
<tr><td>散逸因素（tan δ）
(120Hz, +20℃)</td><td>
<table>
<tr><td>Working voltage</td><td colspan="4">6.3 to 50V</td></tr>
<tr><td>Capacitance</td><td>≦ 1.0uF</td><td>1.5 to 6.8 uF</td><td>10 to 68 uF</td><td>≧ 100uF</td></tr>
<tr><td>tan δ max.</td><td>0.04</td><td>0.06</td><td>0.08</td><td>0.1</td></tr>
</table>
</td></tr>
<tr><td>Characteristics at High and Low Temperature</td><td>
Test conditions
<table>
<tr><td>Conditions</td><td>Derating(for 10 to 50V only)</td><td>Rating</td></tr>
<tr><td>Duration</td><td>1000 hours</td><td>1000 hours</td></tr>
<tr><td>Ambient temperature</td><td>+ 105℃</td><td>+ 85℃</td></tr>
<tr><td>Applied voltage</td><td>Derated working voltage</td><td>Rated working voltage</td></tr>
<tr><td>Source impedance</td><td>1Ω / V</td><td>1Ω / V</td></tr>
</table>
Derating voltage +105℃ for 10~50V working
<table>
<tr><td>Working voltage[V] DC</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td></tr>
<tr><td>Derating voltage [V] DC</td><td>6.3</td><td>10</td><td>16</td><td>23</td><td>33</td></tr>
</table>
Post test requirements at +20℃
Leakage current : ≦ 0.01% CV or 00625[uA], whichever is greater
Capacitance change : ±10% of initial measured value
tan δ : ≦ Initial specified value
</td></tr>
<tr><td>Moisture Resistance</td><td>
Test conditions
Relative humidity : 90 to 95% without load
Ambient temperature : +40℃
Duration: 500 hours
Post test requirements at +20℃
Leakage current : ≦ 0.012CV or 0.75[uF], whichever is greater
Capacitance change : ±10% of initial measured value
tan δ : ≦ 150% of initial specified value
</td></tr>
<tr><td>Endurance</td><td></td></tr>
<tr><td>Shelf Life</td><td>
Test conditions
Duration : 1000 hours
Ambient temperature : +85℃
Applied voltage : (none)
Post test requirements at +20℃
Leakage current : ≦ 0.01% CV or 00625[uA], whichever is greater
Capacitance change : ±10% of initial measured value
tan δ : ≦ Initial specified value
</td></tr>
</table>

Tantalum Capacitor Dipped Type outline Drawings



Dimensions Millimeters

Case Size	A	B	C	D	E	F
Formats 1/2 H1 max	7.0	8.0	9.5	11.0	13.0	16.5
D1 max	4.5	5.0	5.5	6.5	8.5	9.5
D max	4.2	4.7	5.5	6.5	8.5	9.5

Wire Length(L)	5,7±1	12,14±1	18,20±1
Code	A	B	C

Rated Voltage, Capacitance of Capacitors

VR(V)	6.3	10	16	25	35	50
Code	0J	1A	1C	1E	1V	1H
Capacitance (uF)	Case Size					
0.10 (104)					A	A
0.15 (154)					A	A
0.22 (224)					A	A
0.33 (334)					A	A
0.47 (474)					A	A
0.68 (684)					A	A
1.0 (105)				A	A	B
1.5 (155)			A	A	A	C
2.2 (225)		A	A	A	B	C
3.3 (335)	A	A	A	B	B	D
4.7 (475)	A	A	B	B	C	D
6.8 (685)	A	B	B	C	D	E
10 (106)	B	B	B	C	D	E
15 (156)	B	C	C	D	E	F
22 (226)	C	C	C	D	E	F
33 (336)	C	D	D	E	F	
47 (476)	D	D	D	E	F	
68 (686)	D	D	E	F		
100 (107)	E	E	E	F		
150 (157)	E	E	F			
220 (227)	E	F				
330 (337)	F					

Leads & Solderability

Tinned radial leads, ⌀ : 0.5 min.
Standard lead spacing : 2.54 ± 0.5 , 5.08 ± 0.5mm

Solderability:

-Recommended soldering bath temperature : 260℃
-Time of immersion : 3s

The tin should cover 95% of wire surface.

Permissible pull test : 10 N.

Packaging of bead tantalum capacitors

Ratings and Part Number Reference