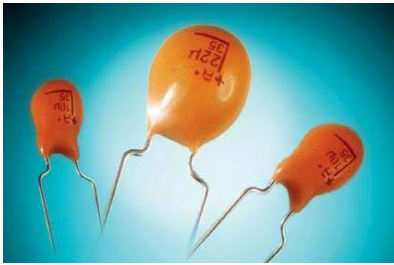


Dipped Radial Capacitors

TEP Series Tin-Lead (Sn/Pb) Finish Product



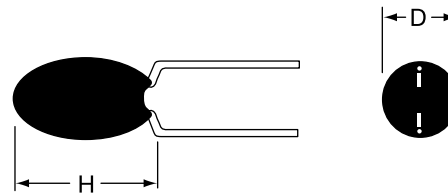
TEP is a Tin-Lead finish version of the conformally coated tantalum radial leaded capacitor (TAP). It is a professional grade device manufactured with a flame retardant coating and featuring low leakage current and impedance, very small physical sizes and exceptional temperature stability, available in bulk and T&R packaging for auto insertion. The wide range of Capacitance, working voltages and case sizes enables TEP to accommodate to almost any application.

Not RoHS Compliant

CASE DIMENSIONS:

millimeters (inches)

Wire Case	C, F, G, H H	B, S, D *H ₁	D
A	8.50 (0.335)	7.00 (0.276)	4.50 (0.177)
B	9.00 (0.354)	7.50 (0.295)	4.50 (0.177)
C	10.0 (0.394)	8.50 (0.335)	5.00 (0.197)
D	10.5 (0.413)	9.00 (0.354)	5.00 (0.197)
E	10.5 (0.413)	9.00 (0.354)	5.50 (0.217)
F	11.5 (0.453)	10.0 (0.394)	6.00 (0.236)
G	11.5 (0.453)	10.0 (0.394)	6.50 (0.256)
H	12.0 (0.472)	10.5 (0.413)	7.00 (0.276)
J	13.0 (0.512)	11.5 (0.453)	8.00 (0.315)
K	14.0 (0.551)		8.50 (0.335)
L	14.0 (0.551)		9.00 (0.354)
M	14.5 (0.571)		9.00 (0.354)
N	16.0 (0.630)		9.00 (0.354)
P	17.0 (0.669)		10.0 (0.394)
R	18.5 (0.728)		10.0 (0.394)



HOW TO ORDER

TEP

Type

106

Capacitance Code
pF code: 1st two digits represent significant figures, 3rd digit represents multiplier (number of zeros to follow)

M

Capacitance Tolerance
K = ±10%
M = ±20%
(For J = ±5% tolerance, please consult factory)

016

Rated DC Voltage

SCS

Suffix indicating wire form and packaging (see page 246)

Dipped Radial Capacitors

TEP Series

TECHNICAL SPECIFICATIONS

Technical Data:	All technical data relate to an ambient temperature of +25°C							
Capacitance Range:	0.10 μ F to 330 μ F							
Capacitance Tolerance:	\pm 10%; \pm 20% (\pm 5% consult your representative for details)							
Rated Voltage DC (V_R)	\leq +85°C:	6.3	10	16	20	25	35	50
Category Voltage (V_C)	\leq +125°C:	4	6.3	10	13	16	23	33
Surge Voltage (V_S)	\leq +85°C:	8	13	20	26	33	46	65
Surge Voltage (V_S)	\leq +125°C:	5	9	12	16	21	28	40
Temperature Range:	-55°C to +125°C							
Dissipation Factor:	\leq 0.04 for C_R 0.1-1.5 μ F \leq 0.06 for C_R 2.2-6.8 μ F \leq 0.08 for C_R 10-68 μ F \leq 0.10 for C_R 100-330 μ F							
Reliability:	1% per 1000 hrs. at 85°C, V_R with 0.1 Ω /V series impedance, 60% confidence level.							

CAPACITANCE AND RATED VOLTAGE RANGE (LETTER DENOTES CASE SIZE)

Capacitance		Rated Voltage DC (V_R)						
μ F	Code	6.3V	10V	16V	20V	25V	35V	50V
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	B
1.0	105				A	A	A	C
1.5	155			A	A	A	A	D
2.2	225		A	A	A	A	B	E
3.3	335	A	A	A	B	B	C	F
4.7	475	A	A	B	C	C	E	G
6.8	685	A	B	C	D	D	F	H
10	106	B	C	D	E	E	F	J
15	156	C	D	E	F	F	H	K
22	226	D	E	F	H	H	K	L
33	336	E	F	F	J	J	M	
47	476	F	G	J	K	M	N	
68	686	G	H	L	N	N		
100	107	H	K	N	N			
150	157	K	N	N				
220	227	M	P	R				
330	337	P	R					

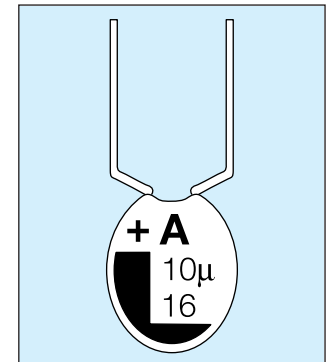
Values outside this standard range may be available on request.

KYOCERA AVX reserves the right to supply capacitors to a higher voltage rating, in the same case size, than that ordered.

MARKING

Polarity, capacitance, rated DC voltage, and an "A" (KYOCERA AVX logo) are laser marked on the capacitor body which is made of flame retardant gold epoxy resin with a limiting oxygen index in excess of 30 (ASTM-D-2863).

- Polarity
- Capacitance
- Voltage
- KYOCERA AVX logo
- Tolerance code:
 - \pm 20% = Standard (no marking)
 - \pm 10% = "K" on reverse side of unit
 - \pm 5% = "J" on reverse side of unit



Dipped Radial Capacitors

TEP Series



RATINGS AND PART NUMBER REFERENCE

Part Number	Case Size	Cap (µF)	DCL (µA) Max.	DF % Max.	ESR Max. (Ω) @100kHz
TEP335(*)006	A	3.3	0.5	6	13
TEP475(*)006	A	4.7	0.5	6	10
TEP685(*)006	A	6.8	0.5	6	8
TEP106(*)006	B	10	0.5	8	6
TEP156(*)006	C	15	0.8	8	5
TEP226(*)006	D	22	1.1	8	3.7
TEP336(*)006	E	33	1.7	8	3
TEP476(*)006	F	47	2.4	8	2
TEP686(*)006	G	68	3.4	8	1.8
TEP107(*)006	H	100	5	10	1.6
TEP157(*)006	K	150	7.6	10	0.9
TEP227(*)006	M	220	11	10	0.9
TEP337(*)006	P	330	16.6	10	0.7
TEP335(*)006	A	3.3	0.5	6	13
TEP225(*)010	A	2.2	0.5	6	13
TEP335(*)010	A	3.3	0.5	6	10
TEP475(*)010	A	4.7	0.5	6	8
TEP685(*)010	B	6.8	0.5	6	6
TEP106(*)010	C	10	0.8	8	5
TEP156(*)010	D	15	1.2	8	3.7
TEP226(*)010	E	22	1.7	8	2.7
TEP336(*)010	F	33	2.6	8	2.1
TEP476(*)010	G	47	3.7	8	1.7
TEP686(*)010	H	68	5.4	8	1.3
TEP107(*)010	K	100	8	10	1
TEP157(*)010	N	150	12	10	0.8
TEP227(*)010	P	220	17.6	10	0.6
TEP337(*)010	R	330	20	10	0.5
TEP155(*)016	A	1.5	0.5	4	10
TEP225(*)016	A	2.2	0.5	6	8
TEP335(*)016	A	3.3	0.5	6	6
TEP475(*)016	B	4.7	0.6	6	5
TEP685(*)016	C	6.8	0.8	6	4
TEP106(*)016	D	10	1.2	8	3.2
TEP156(*)016	E	15	1.9	8	2.5
TEP226(*)016	F	22	2.8	8	2
TEP336(*)016	F	33	4.2	8	1.6
TEP476(*)016	J	47	6	8	1.3
TEP686(*)016	L	68	8.7	8	1
TEP107(*)016	N	100	12.8	10	0.8
TEP157(*)016	N	150	19.2	10	0.6
TEP227(*)016	R	220	20	10	0.5
TEP105(*)020	A	1	0.5	4	10
TEP155(*)020	A	1.5	0.5	4	9
TEP225(*)020	A	2.2	0.5	6	7
TEP335(*)020	B	3.3	0.5	6	5.5
TEP475(*)020	C	4.7	0.7	6	4.5
TEP685(*)020	D	6.8	1	6	3.6
TEP106(*)020	E	10	1.6	8	2.9
TEP156(*)020	F	15	2.4	8	2.3

Part Number	Case Size	Cap (µF)	DCL (µA) Max.	DF % Max.	ESR Max. (Ω) @100kHz
TEP226(*)020	H	22	3.5	8	1.8
TEP336(*)020	J	33	5.2	8	1.4
TEP476(*)020	K	47	7.5	8	1.2
TEP686(*)020	N	68	10.8	8	0.9
TEP107(*)020	N	100	16	10	0.6
TEP105(*)025	A	1	0.5	4	10
TEP155(*)025	A	1.5	0.5	4	8
TEP225(*)025	A	2.2	0.5	6	6
TEP335(*)025	B	3.3	0.6	6	5
TEP475(*)025	C	4.7	0.9	6	4
TEP685(*)025	D	6.8	1.3	6	3.1
TEP106(*)025	E	10	2	8	2.5
TEP156(*)025	F	15	3	8	2
TEP226(*)025	H	22	4.4	8	1.5
TEP336(*)025	J	33	6.6	8	1.2
TEP476(*)025	M	47	9.4	8	1
TEP686(*)025	N	68	13.6	8	0.8
TEP104(*)035	A	0.1	0.5	4	26
TEP154(*)035	A	0.15	0.5	4	21
TEP224(*)035	A	0.22	0.5	4	17
TEP334(*)035	A	0.33	0.5	4	15
TEP474(*)035	A	0.47	0.5	4	13
TEP684(*)035	A	0.68	0.5	4	10
TEP105(*)035	A	1	0.5	4	8
TEP155(*)035	A	1.5	0.5	4	6
TEP225(*)035	B	2.2	0.6	6	5
TEP335(*)035	C	3.3	0.9	6	4
TEP475(*)035	E	4.7	1.3	6	3
TEP685(*)035	F	6.8	1.9	6	2.5
TEP106(*)035	F	10	2.8	8	2
TEP156(*)035	H	15	4.2	8	1.6
TEP226(*)035	K	22	6.1	8	1.3
TEP336(*)035	M	33	9.2	8	1
TEP476(*)035	N	47	10	8	0.8
TEP104(*)050	A	0.1	0.5	4	26
TEP154(*)050	A	0.15	0.5	4	21
TEP224(*)050	A	0.22	0.5	4	17
TEP334(*)050	A	0.33	0.5	4	15
TEP474(*)050	A	0.47	0.5	4	13
TEP684(*)050	B	0.68	0.5	4	10
TEP105(*)050	C	1	0.5	4	8
TEP155(*)050	D	1.5	0.6	4	6
TEP225(*)050	E	2.2	0.8	6	3.5
TEP335(*)050	F	3.3	1.3	6	3
TEP475(*)050	G	4.7	1.8	6	2.5
TEP685(*)050	H	6.8	2.7	6	2
TEP106(*)050	J	10	4	8	1.6
TEP156(*)050	K	15	6	8	1.2
TEP226(*)050	L	22	8.8	8	1