

Solid Tantalum Chip Capacitors – TC211 Series

Operating Temp.: -55°C ~ +125°C



FEATURES

- Meets or Exceeds EIA Standard 535BAAC
- Taped and Reeled per EIA 481-1
- C_R range: 0.10-680μF
- V_R range: 2.5-50VDC
- Low profile options available
- Ink marked case
- 100% Surge Current test
- Capacitance Tolerance: ±10%, ±20%
- Green environmental protection

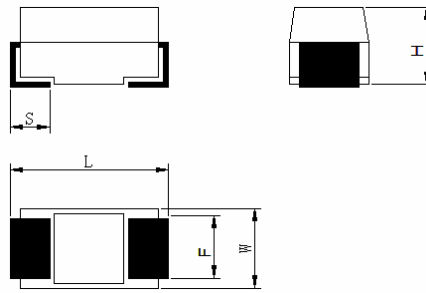
APPLICATIONS

- Communication
- Consumer Electronics
- Automotive Electronics
- Instruments
- Medical Electronics

PRODUCT IDENTIFICATION

<u>TC</u>	<u>211</u>	<u>B</u>	<u>105</u>	<u>M</u>	<u>035</u>	<u>A</u>																																
①	②	③	④	⑤	⑥	⑦																																
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SHAPE AND DIMENSIONS



Unit: mm [inch]

Case	EIA	L	W	H	F	S
P	2012-12	2.00±0.15 [.078±.006]	1.25±0.15 [.049±.006]	1.10±0.15 [.043±.006]	0.90 ±0.10 [.035 ±.004]	0.50±0.30 [.020±.012]
A	3216-18	3.20±0.20 [.126±.008]	1.60±0.20 [.063±.008]	1.60±0.20 [.063±.008]	1.20±0.10 [.04 ±.004]	0.80±0.30 [.031±.012]
B	3528-21	3.50±0.20 [.138±.008]	2.80±0.20 [.110±.008]	1.90±0.20 [.075±.008]	2.20±0.10 [.087±.004]	0.80±0.30 [.03 ±.012]
C	6032-28	6.00±0.30 [.236±.012]	3.20±0.30 [.126±.012]	2.50±0.30 [.098±.012]	2.20±0.10 [.087±.004]	1.30±0.30 [.051±.012]
D	7343-31	7.30±0.30 [.287±.012]	4.30±0.30 [.169±.012]	2.80±0.30 [.110±.012]	2.40±0.10 [.094±.004]	1.30±0.30 [.051±.012]
E	7343-43	7.30±0.30 [.287±.012]	4.30±0.30 [.169±.012]	4.00±0.30 [.161±.012]	2.40±0.10 [.094±.004]	1.30±0.30 [.051±.012]

TECHNICAL SPECIFICATION

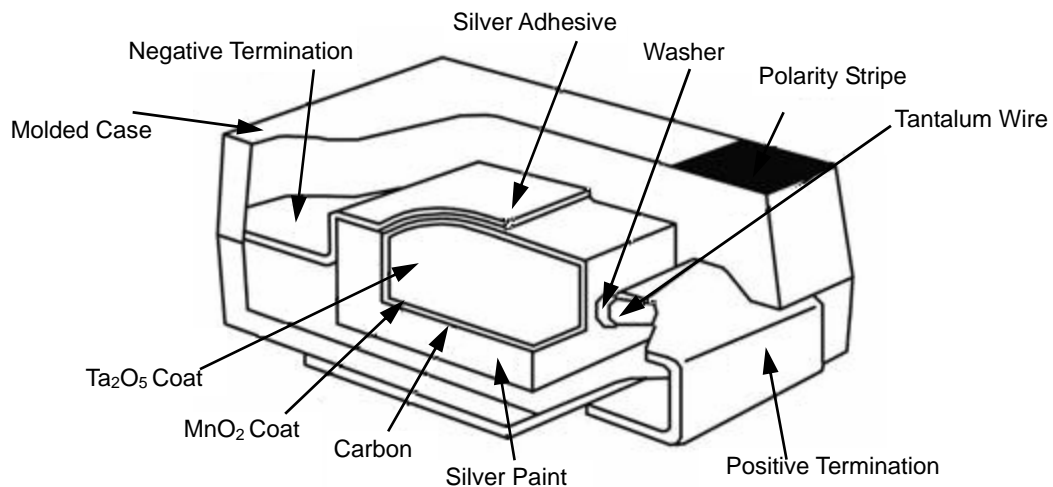
Item	SPEC										Test Condition
Operating Temp	-55°C ~ +125°C										
C _R Range	0.10μF~ 680μF										25°C, 120Hz
C _R Tolerance	±10% or ±20%										25°C, 120Hz
Rated Voltage (V _R)	2.5V	4V	6.3V	10V	16V	20V	25V	35V	50V	85°C	
Category Voltage (V _C)	1.6V	2.5V	4V	6.3V	10V	13V	16V	20V	32V	125°C	
Surge Voltage (V _S)	3.3V	5.2V	8V	13V	20V	26V	32V	46V	65V	85°C	
Surge Voltage (V _S)	2.2V	3.4V	5V	8V	13V	16V	20V	28V	40V	125°C	

STANDARD C-V VALUE BY CASE CODE

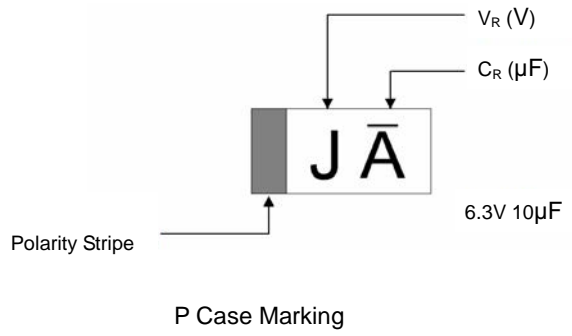
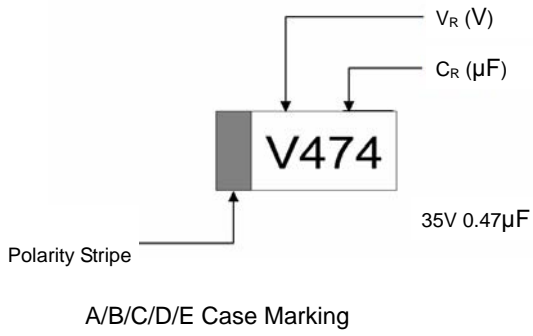
Rated Voltage (V _R)	2.5	4	6.3	10	16	20	25	35	50	
Voltage Code	e	G	J	A	C	D	E	V	T	
C _R (μF)	C Code	Case Code								
0.1	104						P		A	A
0.15	154						P		A	B/A
0.22	224						P		A	B/A
0.33	334						P	A	A	B/A
0.47	474					P	P	A	B/A	C/B
0.68	684				P	P	A/P	A	B/A	C/B
1.0	105			A/P	A/P	A/P	A/P	B/A	B/A	C/B
1.5	155			A/P	A/P	A/P	B/A	B/A	C/B	D/C
2.2	225		A	A/P	A/P	B/A/P	B/A	C/B/A	C/B	D/C
3.3	335		A/P	A/P	A/P	B/A	B/A	C/B	C/B	D/C
4.7	475		A/P	A/P	B/A/P	B/A	C/B/A	C/B/A	D/C/B	D
6.8	685		A/P	B/A/P	B/A	C/B/A	D/C/B	D/C/B	D/C	D
10	106	A/P	B/A/P	B/A/P	B/A/P	C/B/A	D/C/B	D/C/B	D/C	E/D
15	156	B/A	B/A	B/A/P	C/B/A	C/B	D/C	D/C	E/D	E
22	226	A/P	B/A	B/A	C/B/A	D/C/B	D/C/B	D	E/D	
33	336	A/P	C/B/A	C/B/A	D/C/B	D/C/B	D/C	E/D	E	
47	476	A	C/B/A	C/B/A	D/C/B	D/C	E/D	E/D	E	
68	686	B/A	D/C/B	D/C/B	D/C	D	E/D	E		
100	107	B/A	D/C/B/A	D/C/B	D/C	D	E			
150	157	B	D/C/B	D/C/B	E/D	E	E			
220	227	B	D/C/B	E/D/C	E/D	E				
330	337		E/ D/C	E/D	E	E				
470	477		E	E	E					
680	687		E							

※: The first case code is standard product and the others are expansion products.

CONSTRUCTION



MARKINGS



Rated Voltage Code

Rated Voltage(V_R)	2.5	4	6.3	10	16	20	25	35	50
Code	e	G	J	A	C	D	E	V	T

Capacitance Code

Capacitance (μF)	0.1	0.15	0.22	0.33	0.47	0.68	1.0	1.5	2.2	3.3	4.7	6.8
Code (P Case)	<u>A</u>	<u>E</u>	<u>J</u>	<u>N</u>	<u>S</u>	<u>W</u>	A	E	J	N	S	W
Code (A/B/C/D/E Case)	104	154	224	334	474	684	105	155	225	335	475	685
Capacitance (μF)	10	15	22	33	47	68	100	220	330	470	680	
Code (P Case)	<u>Ā</u>	<u>Ē</u>	<u>J̄</u>	<u>N̄</u>	<u>S̄</u>	<u>W̄</u>						
Code (A/B/C/D/E Case)	106	156	226	336	476	686	107	227	337	477	687	

SPECIFICATIONS

Capacitance (μ F)	Case	Part Number	DCL (μ A) 25 $^{\circ}$ C Max.	DF(%) +25 $^{\circ}$ C 120Hz Max.	ESR(Ω) +25 $^{\circ}$ C 100KHz Max.
2.5V, +85 $^{\circ}$ C (1.6V @ +125 $^{\circ}$ C)					
10.0	P	TC211P106M002A	0.5	6.0	6.0
10.0	A	TC211A106M002A	0.5	6.0	5.0
15.0	A	TC211A156M002A	0.5	6.0	6.0
15.0	B	TC211B156M002A	0.5	6.0	4.0
22.0	P	TC211P226M002A	0.55	20.0	6.0
22.0	A	TC211A226M002A	0.55	6.0	4.0
33.0	P	TC211P336M002A	0.82	20.0	6.0
33.0	A	TC211A336M002A	0.82	6.0	4.0
47.0	A	TC211A476M002A	1.17	12.0	4.0
68.0	A	TC211A686M002A	1.7	18.0	3.0
68.0	B	TC211B686M002A	1.7	6.0	2.0
100.0	A	TC211A107M002A	2.5	30.0	2.5
100.0	B	TC211B107M002A	2.5	8.0	1.5
150.0	B	TC211B157M002A	3.75	10.0	2.0
220.0	B	TC211B227M002A	5.5	18.0	2.0
4V, +85 $^{\circ}$ C (2.5V @ +125 $^{\circ}$ C)					
2.2	A	TC211A225M004A	0.5	6.0	8.0
3.3	P	TC211P335M004A	0.5	6.0	10.0
3.3	A	TC211A335M004A	0.5	6.0	8.0
4.7	P	TC211P475M004A	0.5	20.0	10.0
4.7	A	TC211A475M004A	0.5	6.0	8.0
6.8	P	TC211P685M004A	0.5	20.0	10.0
6.8	A	TC211A685M004A	0.5	6.0	6.0
10.0	P	TC211P106M004A	0.5	8.0	10.0
10.0	A	TC211A106M004A	0.5	6.0	6.0
10.0	B	TC211B106M004A	0.5	6.0	3.5
15.0	A	TC211A156M004A	0.6	6.0	4.0
15.0	B	TC211B156M004A	0.6	6.0	3.5
22.0	A	TC211A226M004A	0.88	6.0	4.0
22.0	B	TC211B226M004A	0.88	6.0	3.5
33.0	A	TC211A336M004A	1.32	6.0	4.0
33.0	B	TC211B336M004A	1.32	6.0	3.5
33.0	C	TC211C336M004A	1.32	6.0	1.8
47.0	A	TC211A476M004A	1.88	12.0	3.0
47.0	B	TC211B476M004A	1.88	6.0	3.0
47.0	C	TC211C476M004A	1.88	6.0	1.8
68.0	B	TC211B686M004A	2.72	6.0	3.5
68.0	C	TC211C686M004A	2.72	6.0	1.6
68.0	D	TC211D686M004A	2.72	6.0	0.8

Capacitance (μ F)	Case	Part Number	DCL (μ A) 25 $^{\circ}$ C Max.	DF(%) +25 $^{\circ}$ C 120Hz Max.	ESR(Ω) +25 $^{\circ}$ C 100KHz Max.
100.0	A	TC211A107M004A	4.0	20.0	5.0
100.0	B	TC211B107M004A	0.4	8.0	2.0
100.0	C	TC211C107M004A	0.4	8.0	1.3
100.0	D	TC211D107M004A	0.4	8.0	0.8
150.0	B	TC211B157M004A	6.0	15.0	2.0
150.0	C	TC211C157M004A	6.0	12.0	1.2
150.0	D	TC211D157M004A	6.0	8.0	0.8
220.0	B	TC211B227M004A	8.8	15	1.0
220.0	C	TC211C227M004A	8.8	12.0	1.0
220.0	D	TC211D227M004A	8.8	8.0	0.8
330.0	C	TC211C337M004A	13.2	10.0	1.2
330.0	D	TC211D337M004A	13.2	8.0	0.7
330.0	E	TC211E337M004A	13.2	8.0	0.7
470.0	E	TC211E477M004A	18.8	16.0	0.8
680.0	E	TC211E687M004A	27.2	12.0	0.5
6.3V, +85 $^{\circ}$ C (4.0V @ +125 $^{\circ}$ C)					
1.0	P	TC211P105M006A	0.5	6.0	25.0
1.0	A	TC211A105M006A	0.5	6.0	14.0
1.5	P	TC211P155M006A	0.5	10.0	25.0
1.5	A	TC211A155M006A	0.5	6.0	8.0
2.2	P	TC211P225M006A	0.5	8.0	20.0
2.2	A	TC211A225M006A	0.5	6.0	8.0
3.3	P	TC211P335M006A	0.5	6.0	10.0
3.3	A	TC211A335M006A	0.5	6.0	8.0
4.7	P	TC211P475M006A	0.5	6.0	10.0
4.7	A	TC211A475M006A	0.5	6.0	6.0
6.8	P	TC211P685M006A	0.5	8.0	10.0
6.8	A	TC211A685M006A	0.5	6.0	6.0
6.8	B	TC211B685M006A	0.5	6.0	3.5
10.0	P	TC211P106M006A	0.63	8.0	10.0
10.0	A	TC211A106M006A	0.63	6.0	4.0
10.0	B	TC211B106M006A	0.63	6.0	3.5
15.0	P	TC211P156M006A	0.94	12.0	7.0
15.0	A	TC211A156M006A	0.94	6.0	4.0
15.0	B	TC211B156M006A	0.94	6.0	3.5
22.0	A	TC211A226M006A	1.38	8.0	4.0
22.0	B	TC211B226M006A	1.38	6.0	3.5
33.0	A	TC211A336M006A	2.07	8.0	4.5
33.0	B	TC211B336M006A	2.07	6.0	3.0
33.0	C	TC211C336M006A	2.07	6.0	1.8

SPECIFICATIONS

Capacitance (μ F)	Case	Part Number	DCL	DF(%)	ESR(Ω)
			(μ A) 25°C Max.	+25°C 120Hz Max.	+25°C 100KHz Max.
47.0	A	TC211A476M006A	2.96	10.0	3.5
47.0	B	TC211B476M006A	2.96	6.0	3.0
47.0	C	TC211C476M006A	2.96	6.0	1.6
68.0	B	TC211B686M006A	4.28	10.0	1.2
68.0	C	TC211C686M006A	4.28	6.0	1.0
68.0	D	TC211D686M006A	4.28	6.0	0.8
100.0	B	TC211B107M006A	6.3	10.0	3.0
100.0	C	TC211C107M006A	6.3	8.0	1.2
100.0	D	TC211D107M006A	6.3	8.0	0.8
150.0	B	TC211B157M006A	9.3	15.0	1.0
150.0	C	TC211C157M006A	9.45	8.0	1.2
150.0	D	TC211D157M006A	9.45	8.0	0.8
220.0	C	TC211C227M006A	13.86	10.0	1.2
220.0	D	TC211D227M006A	13.86	8.0	0.7
220.0	E	TC211E227M006A	13.86	8.0	0.5
330.0	D	TC211D337M006A	20.79	8.0	0.5
330.0	E	TC211E337M006A	20.79	8.0	0.5
470.0	E	TC211E477M006A	29.61	10.0	0.5
10V, +85°C (6.3V @ +125°C)					
0.68	P	TC211P684M010A	0.5	4.0	28.0
1.0	P	TC211P105M010A	0.5	10.0	25.0
1.0	A	TC211A105M010A	0.5	4.0	13.0
1.5	P	TC211P155M010A	0.5	10.0	10.0
1.5	A	TC211A155M010A	0.5	6.0	8.0
2.2	P	TC211P225M010A	0.5	6.0	10.0
2.2	A	TC211A225M010A	0.5	6.0	8.0
3.3	P	TC211P335M010A	0.5	6.0	15.0
3.3	A	TC211A335M010A	0.5	6.0	6.0
4.7	P	TC211P475M010A	0.5	6.0	10.0
4.7	A	TC211A475M010A	0.5	6.0	6.0
4.7	B	TC211B475M010A	0.5	6.0	3.5
6.8	A	TC211A685M010A	0.68	6.0	6.0
6.8	B	TC211B685M010A	0.68	6.0	3.5
10.0	P	TC211P106M010A	1.0	20.0	30.0
10.0	A	TC211A106M010A	1.0	6.0	4.0
10.0	B	TC211B106M010A	1.0	6.0	3.5
15.0	A	TC211A156M010A	1.5	6.0	6.0
15.0	B	TC211B156M010A	1.5	6.0	3.5
15.0	C	TC211C156M010A	1.5	6.0	1.8
22.0	A	TC211A226M010A	2.2	8.0	4.0
22.0	B	TC211B226M010A	2.2	6.0	3.0

Capacitance (μ F)	Case	Part Number	DCL	DF(%)	ESR(Ω)
			(μ A) 25°C Max.	+25°C 120Hz Max.	+25°C 100KHz Max.
22.0	C	TC211C226M010A	2.2	6.0	1.8
33.0	B	TC211B336M010A	3.3	6.0	3.5
33.0	C	TC211C336M010A	3.3	6.0	1.6
33.0	D	TC211D336M010A	3.3	6.0	0.8
47.0	B	TC211B476M010A	4.7	6.0	1.0
47.0	C	TC211C476M010A	4.7	6.0	1.2
47.0	D	TC211D476M010A	4.7	6.0	0.8
68.0	C	TC211C686M010A	6.8	6.0	1.2
68.0	D	TC211D686M010A	6.8	6.0	0.8
100.0	C	TC211C107M010A	10.0	8.0	1.2
100.0	D	TC211D107M010A	10.0	8.0	0.7
150.0	D	TC211D157M010A	15.0	8.0	0.7
150.0	E	TC211E157M010A	15.0	8.0	0.5
220.0	D	TC211D227M010A	22.0	8.0	0.5
220.0	E	TC211E227M010A	22.0	8.0	0.5
330.0	E	TC211E337M010A	33.0	10.0	0.5
470.0	E	TC211E477M010A	47.0	10.0	0.5
16V, +85°C (10V @ +125°C)					
0.47	P	TC211P474M016A	0.5	10.0	25.0
0.68	P	TC211P684M016A	0.5	10.0	25.0
1.0	P	TC211P105M016A	0.5	10.0	25.0
1.0	A	TC211A105M016A	0.5	6.0	10.0
1.5	P	TC211P155M016A	0.5	6.0	20.0
1.5	A	TC211A155M016A	0.5	6.0	8.0
2.2	P	TC211P225M016A	0.5	8.0	25.0
2.2	A	TC211A225M016A	0.5	6.0	6.0
2.2	B	TC211B225M016A	0.5	6.0	4.0
3.3	A	TC211A335M016A	0.52	6.0	6.0
3.3	B	TC211B335M016A	0.52	6.0	3.5
4.7	A	TC211A475M016A	0.75	6.0	6.0
4.7	B	TC211B475M016A	0.75	6.0	3.5
6.8	A	TC211A685M016A	1.08	6.0	7.0
6.8	B	TC211B685M016A	1.08	6.0	3.5
6.8	C	TC211C685M016A	1.08	6.0	2.0
10.0	A	TC211A106M016A	1.6	8.0	7.0
10.0	B	TC211B106M016A	1.6	6.0	2.8
10.0	C	TC211C106M016A	1.6	6.0	1.8
15.0	B	TC211B156M016A	2.4	6.0	3.0
15.0	C	TC211C156M016A	2.4	6.0	1.8
22.0	B	TC211B226M016A	3.52	8.0	2.2
22.0	C	TC211C226M016A	3.52	6.0	1.6

SPECIFICATIONS

Capacitance (μ F)	Case	Part Number	DCL	DF(%)	ESR(Ω)
			(μ A) 25°C Max.	+25°C 120Hz Max.	+25°C 100KHz Max.
22.0	D	TC211D226M016A	3.52	6.0	0.8
33.0	B	TC211B336M016A	5.28	8.0	2.0
33.0	C	TC211C336M016A	5.28	6.0	1.2
33.0	D	TC211D336M016A	5.28	6.0	0.8
47.0	C	TC211C476M016A	7.52	6.0	1.2
47.0	D	TC211D476M016A	7.52	6.0	0.8
68.0	D	TC211D686M016A	10.8	6.0	0.8
100.0	D	TC211D107M016A	16	8.0	0.7
150.0	E	TC211E157M016A	24	8.0	0.5
220.0	E	TC211E227M016A	35.2	10.0	0.5
330.0	E	TC211E337M016A	52.8	10.0	0.5
20V, +85°C (13V @ +125°C)					
0.1	P	TC211P104M020A	0.5	4.0	25.0
0.15	P	TC211P154M020A	0.5	4.0	25.0
0.22	P	TC211P224M020A	0.5	4.0	25.0
0.33	P	TC211P334M020A	0.5	4.0	25.0
0.47	P	TC211P474M020A	0.5	4.0	25.0
0.68	P	TC211P684M020A	0.5	4.0	25.0
0.68	A	TC211A684M020A	0.5	4.0	12.0
1.0	P	TC211P105M020A	0.5	6.0	15.5
1.0	A	TC211A105M020A	0.5	4.0	10.0
1.5	A	TC211A155M020A	0.5	6.0	8.0
1.5	B	TC211B155M020A	0.5	6.0	5.0
2.2	A	TC211A225M020A	0.5	6.0	7.0
2.2	B	TC211B225M020A	0.5	6.0	3.5
3.3	A	TC211A335M020A	0.66	6.0	7.0
3.3	B	TC211B335M020A	0.66	6.0	3.5
4.7	A	TC211A475M020A	0.94	6.0	4.0
4.7	B	TC211B475M020A	0.94	6.0	3.5
4.7	C	TC211C475M020A	0.94	6.0	2.4
6.8	B	TC211B685M020A	1.36	6.0	3.5
6.8	C	TC211C685M020A	1.36	6.0	2.0
6.8	D	TC211D685M020A	1.36	6.0	1.9
10.0	B	TC211B106M020A	2.0	6.0	3.0
10.0	C	TC211C106M020A	2.0	6.0	1.8
10.0	D	TC211D106M020A	2.0	6.0	1.0
15.0	C	TC211C156M020A	3.0	6.0	1.7
15.0	D	TC211D156M020A	3.0	6.0	1.0
22.0	C	TC211C226M020A	4.4	6.0	1.2
22.0	D	TC211D226M020A	4.4	6.0	0.8
33.0	C	TC211C336M020A	6.6	6.0	1.2

Capacitance (μ F)	Case	Part Number	DCL	DF(%)	ESR(Ω)
			(μ A) 25°C Max.	+25°C 120Hz Max.	+25°C 100KHz Max.
33.0	D	TC211D336M020A	6.6	6.0	0.8
47.0	D	TC211D476M020A	9.4	6.0	0.8
47.0	E	TC211E476M020A	9.4	6.0	0.8
68.0	D	TC211D686M020A	13.6	6.0	0.8
68.0	E	TC211E686M020A	13.6	6.0	0.8
100.0	E	TC211E107M020A	20.0	8.0	0.5
150.0	E	TC211E157M020A	30.0	8.0	0.5
25V, +85°C (16V @ +125°C)					
0.22	A	TC211A224M025A	0.5	4.0	15.0
0.33	A	TC211A334M025A	0.5	4.0	15.0
0.47	A	TC211A474M025A	0.5	4.0	14.0
0.68	A	TC211A684M025A	0.5	4.0	10.0
1.0	A	TC211A105M025A	0.5	4.0	8.0
1.0	B	TC211A105M025A	0.5	4.0	5.0
1.5	A	TC211A155M025A	0.5	6.0	10.0
1.5	B	TC211B155M025A	0.5	6.0	5.0
2.2	A	TC211A225M025A	0.6	6.0	6.0
2.2	B	TC211B225M025A	0.55	6.0	4.5
2.2	C	TC211C225M025A	0.55	6.0	3.5
3.3	B	TC211B335M025A	0.82	6.0	3.5
3.3	C	TC211C335M025A	0.82	6.0	2.5
4.7	A	TC211A475M025A	1.17	8.0	6.0
4.7	B	TC211B475M025A	1.17	6.0	2.0
4.7	C	TC211C475M025A	1.17	6.0	2.4
6.8	B	TC211B685M025A	1.70	6.0	3.0
6.8	C	TC211C685M025A	1.70	6.0	1.9
6.8	D	TC211D685M025A	1.70	6.0	1.2
10.0	B	TC211B106M025A	2.5	6.0	3.0
10.0	C	TC211C106M025A	2.5	6.0	1.5
10.0	D	TC211D106M025A	2.5	6.0	1.0
15.0	C	TC211C156M025A	3.75	6.0	1.5
15.0	D	TC211D156M025A	3.75	6.0	1.0
22.0	D	TC211D226M025A	5.5	6.0	0.8
33.0	D	TC211D336M025A	8.25	6.0	0.8
33.0	E	TC211E336M025A	8.25	6.0	0.7
47.0	D	TC211D476M025A	11.7	6.0	0.8
47.0	E	TC211E476M025A	11.7	6.0	0.7
68.0	E	TC211E686M025A	17.0	6.0	0.7
35V, +85°C (20V @ +125°C)					
0.1	A	TC211A104M035A	0.5	4.0	20.0
0.15	A	TC211A154M035A	0.5	4.0	19.0

SPECIFICATIONS

Capacitance (μ F)	Case	Part Number	DCL	DF(%)	ESR(Ω)
			(μ A) 25 $^{\circ}$ C Max.	+25 $^{\circ}$ C 120Hz Max.	+25 $^{\circ}$ C 100KHz Max.
0.22	A	TC211A224M035A	0.5	4.0	18.0
0.33	A	TC211A334M035A	0.5	4.0	15.0
0.47	A	TC211A474M035A	0.5	4.0	14.0
0.47	B	TC211B474M035A	0.5	4.0	8.0
0.68	A	TC211A684M035A	0.5	4.0	10.0
0.68	B	TC211B684M035A	0.5	4.0	6.5
1.0	A	TC211A105M035A	0.5	4.0	10.0
1.0	B	TC211B105M035A	0.5	4.0	5.0
1.5	B	TC211B155M035A	0.52	6.0	5.0
1.5	C	TC211C155M035A	0.52	6.0	4.5
2.2	B	TC211B225M035A	0.77	6.0	4.0
2.2	C	TC211C225M035A	0.77	6.0	3.5
3.3	B	TC211B335M035A	1.15	6.0	3.5
3.3	C	TC211C335M035A	1.15	6.0	2.5
4.7	B	TC211B475M035A	1.64	6.0	2.0
4.7	C	TC211C475M035A	1.64	6.0	2.5
4.7	D	TC211D475M035A	1.64	6.0	1.5
6.8	C	TC211C685M035A	2.38	6.0	2.0
6.8	D	TC211D685M035A	2.38	6.0	1.5
10.0	C	TC211C106M035A	3.5	6.0	2.0
10.0	D	TC211D106M035A	3.5	6.0	1.0
15.0	D	TC211D156M035A	5.25	6.0	1.0
15.0	E	TC211E156M035A	5.25	6.0	0.9
22.0	D	TC211D226M035A	7.7	6.0	0.8
22.0	E	TC211E226M035A	7.7	6.0	0.7
33.0	E	TC211E336M035A	11.0	6.0	0.6
47.0	E	TC211E476M035A	16.5	8.0	0.6

Capacitance (μ F)	Case	Part Number	DCL	DF(%)	ESR(Ω)
			(μ A) 25 $^{\circ}$ C Max.	+25 $^{\circ}$ C 120Hz Max.	+25 $^{\circ}$ C 100KHz Max.
50V, +85 $^{\circ}$ C (32V @ +125 $^{\circ}$ C)					
0.1	A	TC211A104M050A	0.5	4.0	22.0
0.15	A	TC211A154M050A	0.5	4.0	19.0
0.15	B	TC211B154M050A	0.5	4.0	16.0
0.22	A	TC211A224M050A	0.5	4.0	18.0
0.22	B	TC211B224M050A	0.5	4.0	14.0
0.33	A	TC211A334M050A	0.5	4.0	15.0
0.33	B	TC211B334M050A	0.5	4.0	10.0
0.47	B	TC211B474M050A	0.5	4.0	9.0
0.47	C	TC211C474M050A	0.5	4.0	8.0
0.68	B	TC211B684M050A	0.5	4.0	8.0
0.68	C	TC211C684M050A	0.5	4.0	7.0
1.0	B	TC211B105M050A	0.5	4.0	7.0
1.0	C	TC211C105M050A	0.5	4.0	5.5
1.5	B	TC211B155M050A	0.75	6.0	4.5
1.5	C	TC211C155M050A	0.75	6.0	3.5
2.2	C	TC211C225M050A	1.1	6.0	3.5
2.2	D	TC211D225M050A	1.1	6.0	2.5
3.3	C	TC211C335M050A	1.65	6.0	3.0
3.3	D	TC211D335M050A	1.65	6.0	2.0
4.7	D	TC211D475M050A	2.35	6.0	1.5
6.8	D	TC211D685M050A	3.4	6.0	1.2
10.0	D	TC211D106M050A	5.0	6.0	1.0
10.0	E	TC211E106M050A	5.0	6.0	0.7
15.0	E	TC211E156M050A	7.5	6.0	0.7