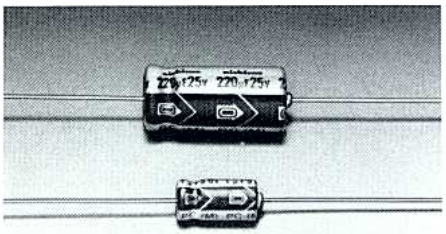
ALUMINUM ELECTROLYTIC CAPACITORS

PC Smaller-sized Electrolytic Capacitor for Use Over Wide Temperature Range (−40 ~ +105°C)

series Axial Lead Type T

- The PC series is designed for use over a wide temperature range of −40°C ~ +105°C and features the same case sizes as the LB series on most ratings.
- This high reliability series is ideally suited for use in consumer electronic, communication and automotive applications.
- The Nichicon Safety Vent is standard on capacitors with diameters ≥10mm.



●Specifications

Item	Performance Characteristics
Operating Temperature Range	−40 ~ +105°C
Voltage Range	6.3 ~ 100V
Capacitance Range	0.47 ~ 10000μF
Capacitance Tolerance	±20% at 120 Hz, 20°C
Leakage Current	After 1 minute of application at rated voltage, leakage current will be no more than 0.03CV or 4μA, whichever is greater.
Dissipation Factor (tan δ)	For capacitance of more than 1000μF, add 0.02 for every increase of 1000μF. Measurement frequency: 120 Hz, Temperature: 20°C

Rated voltage (V)	6.3	10	16	25	35	50	63	100
tan δ (MAX.)	0.24	0.21	0.18	0.16	0.14	0.12	0.10	0.08

Low Temperature Characteristics — Measurement frequency: 120 Hz

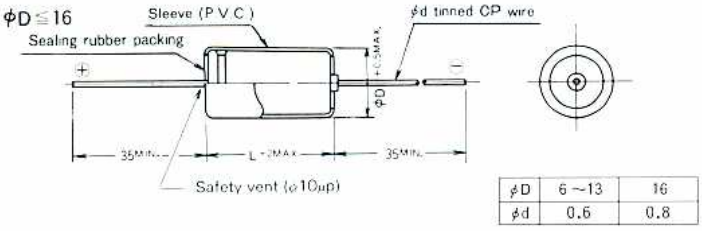
Rated voltage (V)		6.3	10	16	25	35	50	63	100
Impedance ratio ZT/Z20 (MAX.)	Z−25°C/Z+20°C	4	3	2	2	2	2	2	2
	Z−40°C/Z+20°C	10	8	6	4	4	4	4	4

Load Life — After the rated voltage has been applied for 1000 hours at a temperature of 105°C, the capacitors will meet the characteristic requirements listed.

Leakage current	Initial specified value or less
Capacitance change	Within ±25% of the initial measurement for capacitors of not more than 16WV or φ6 Within ±20% of the initial measurement for capacitors of not less than 25WV or above φ6
tan δ	200% or less of initial specified value
Appearance	No excessive leak of electrolyte or abnormal deformity

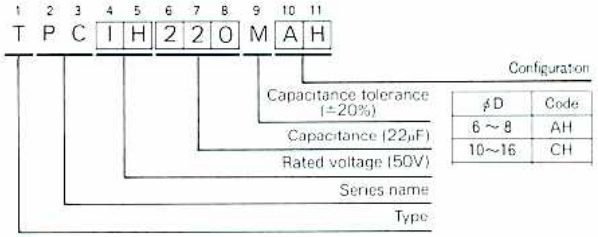
Shelf Life	After capacitors have been stored without load at 105°C for 1000 hours and applying voltage according to JIS C-5102 4-3, capacitors will meet the specified value for load life characteristics listed above.
Marking	Printed with black letters on clear blue sleeve according to JIS C-5141.
Applicable Standards	Characteristics W of JIS C-5141 and JIS C-5102.

Axial Lead Type



φD	6 ~ 13	16
φd	0.6	0.8

Type numbering system (Example: 50V 22μF)



φD	Code
6 ~ 8	AH
10~16	CH

●Nominal Dimensions

D X L (mm)

Cap. (μF) \ WV.	Code	6.3	10	16	25	35	50	63	100
		0J	1A	1C	1E	1V	1H	1J	2A
0.47	R47						6x12		6X12
1.0	010						6x12		6X12
2.2	2R2						6X12		6X12
3.3	3R3						6X12		6X12
4.7	4R7						6X12		6X12
10	100						6X12	6X12	8X16
22	220					6X12	6X16	8X16	8X20
33	330				6X12	8X16	8X16	8X16	10X21
47	470			6X12	6X16	8X16	8X16	8X20	10X26
100	101		6X16	8X16	8X16	8X20	10X21	10X21	13X26
220	221	8X16	8X16	8X20	10X21	10X26	10X26	13X26	16X31.5
330	331	8X20	8X20	10X21	10X26	13X26	13X26	13X31.5	16X41.5
470	471	10X21	10X21	10X26	10X31	13X31.5	13X31.5	16X31.5	
1,000	102	10X26	10X31	13X26	13X31.5	16X31.5	16X41.5		
2,200	222	13X26	16X31.5	16X31.5	16X41.5				
3,300	332	16X31.5	16X31.5						
4,700	472	16X41.5							

For mm to inch conversions, refer to Inside Back Cover or multiply by .03937.

Ripple coefficient

●Coefficient for frequency compensation

CAP (μF) \ Frequency	120Hz	300Hz	1kHz	10kHz~
~ 47	1	1.35	1.57	2.0
100~ 470	1	1.23	1.34	1.5
1000~10000	1	1.10	1.13	1.15

●Coefficient for temperature compensation

Ambient temperature (°C)	~+70	+85	+105
Compensating coefficient	1.62	1.40	1