

MTPH

Vishay



Wet Tantalum Capacitors



FEATURES

- Maximum CV/unit volume
- Ruggedized construction
- Very low dissipation factor
- Very low DC leakage
- 100% "hot" 85°C DCL screening
- 100% voltage age at 85°C - 48 hours
- Quality assurance testing on each production lot to MIL-STD-202
- Accelerated life: 0.65%/AQL
- Recorded available test data
- Reliability: 0.1%/1000 hours

APPLICATIONS

- Timing circuit
- Filter coupling
- Energy storage
- By-pass circuits

PERFORMANCE CHARACTERISTICS

Operating Temperature: - 55°C to + 85°C

Voltage Range: 6 to 60VDC

Reverse Voltage: None

Capacitance Range: 4.7μF to 470μF

Tolerance Range: ± 10%, ± 20%

DC Leakage: At + 25°C - 2.0μA max

At + 85°C - 6.0 to 10.0μA max

MAX RMS RIPPLE CURRENT AT 85°C

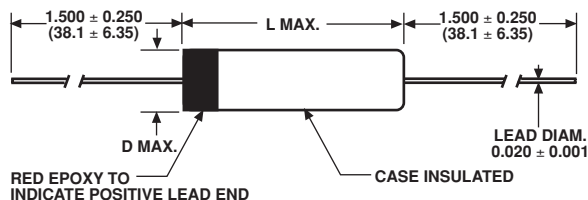
Case Code	A	B	C
Milliamps	12.5	50	140

Case Sizes: (Three) 0.115 x 0.403 to 0.225 x 0.778

ORDERING INFORMATION

MTPH	156	K	020	P	1	A
MTPH SERIES	CAPACITANCE CODE	CAPACITANCE TOLERANCE	DC VOLTAGE RATING	CASE CODE	STYLE NUMBER	CASE SIZE CODE
Subminiature/High Reliability	This is expressed in Picofarads. The first two digits are the significant figures. The third digit is the number of zeros to follow.	M = ± 20% K = ± 10%	This is expressed in volts. To complete the three-digit block, zeros precede the voltage rating.	P = Polar	1 = Mylar Sleeve	

DIMENSIONS in inches [millimeters]



CASE	D	L	APPROX WEIGHT GRAMS*
A	0.115 (2.92)	0.403 (10.23)	0.50
B	0.145 (3.68)	0.600 (15.24)	1.00
C	0.225 (5.72)	0.778 (19.76)	2.60

*1 Gram = 0.035oz



Wet Tantalum Capacitors

MTPH

Vishay

STANDARD RATINGS									
CAP (μ F)	VOLTS DC	CASE SIZE	PART NUMBER	MAX DCL μ A		MAX ESR Ω + 25°C	MAX Z Ω - 55°C	MAX % Δ C FROM + 25°C	
				+ 25°C	+ 85°C			- 55°C	+ 85°C
47	6	A	MTPH476*006P1A	2.0	6.0	9.6	85	- 60	+ 15
150	6	B	MTPH157*006P1B	2.0	8.0	3.9	35	- 50	+ 15
180	6	B	MTPH187*006P1B	2.0	8.0	3.4	32	- 50	+ 15
450	6	C	MTPH457*006P1C	2.0	10.0	1.9	25	- 60	+ 15
470	6	C	MTPH477*006P1C	2.0	10.0	1.8	23	- 60	+ 15
33	10	A	MTPH336*010P1A	2.0	6.0	11.3	100	- 40	+ 15
100	10	B	MTPH107*010P1B	2.0	8.0	4.0	46	- 45	+ 15
120	10	B	MTPH127*010P1B	2.0	8.0	3.5	42	- 50	+ 15
300	10	C	MTPH307*010P1C	2.0	10.0	1.8	31	- 60	+ 15
330	10	C	MTPH337*010P1C	2.0	10.0	1.6	31	- 60	+ 15
22	15	A	MTPH226*015P1A	2.0	6.0	12.1	120	- 40	+ 12
68	15	B	MTPH686*015P1B	2.0	8.0	6.2	58	- 45	+ 12
80	15	B	MTPH806*015P1B	2.0	8.0	5.3	50	- 45	+ 12
200	15	C	MTPH207*015P1C	2.0	10.0	2.0	37	- 50	+ 12
220	15	C	MTPH227*015P1C	2.0	10.0	1.8	36	- 50	+ 12
15	20	A	MTPH156*020P1A	2.0	6.0	17.7	150	- 40	+ 11
47	20	B	MTPH476*020P1B	2.0	8.0	6.8	73	- 40	+ 11
60	20	B	MTPH606*020P1B	2.0	8.0	7.1	60	- 45	+ 11
150	20	C	MTPH157*020P1C	2.0	10.0	2.7	38	- 50	+ 11
10	30	A	MTPH106*030P1A	2.0	6.0	21.2	200	- 35	+ 10
45	30	B	MTPH456*030P1B	2.0	8.0	7.1	80	- 35	+ 10
120	30	C	MTPH127*030P1C	2.0	10.0	3.3	42	- 45	+ 10
10	35	A	MTPH106*035P1A	2.0	6.0	21.2	240	- 35	+ 10
100	35	C	MTPH107*035P1C	2.0	10.0	4.0	48	- 45	+ 10
6.8	50	A	MTPH685*050P1A	2.0	6.0	31.2	310	- 30	+ 10
30	50	B	MTPH306*050P1B	2.0	8.0	9.7	120	- 30	+ 10
33	50	B	MTPH336*050P1B	2.0	8.0	8.8	120	- 30	+ 10
68	50	C	MTPH686*050P1C	2.0	10.0	4.3	54	- 40	+ 10
78	50	C	MTPH786*050P1C	2.0	10.0	3.7	52	- 40	+ 10
4.7	60	A	MTPH475*060P1A	2.0	6.0	39.5	400	- 30	+ 9
6.8	60	A	MTPH685*060P1A	2.0	6.0	31.2	367	- 30	+ 9
10	60	B	MTPH106*060P1B	2.0	8.0	23.9	217	- 35	+ 9
15	60	B	MTPH156*060P1B	2.0	8.0	17.7	174	- 35	+ 9
22	60	B	MTPH226*060P1B	2.0	8.0	14.5	140	- 30	+ 9
33	60	C	MTPH336*060P1C	2.0	10.0	7.2	75	- 35	+ 9
47	60	C	MTPH476*060P1C	2.0	10.0	5.6	62	- 40	+ 9
68	60	C	MTPH686*060P1C	2.0	10.0	4.3	51	- 40	+ 9

* Insert appropriate letter code for tolerance: M = $\pm$ 20%, K = $\pm$ 10%