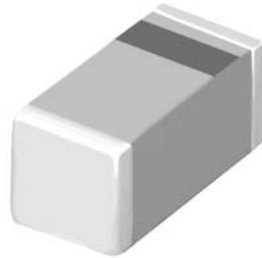
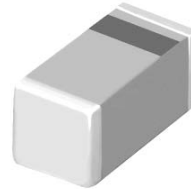


## Miniature Surface Mount Tantalum Capacitors



**0603**  
footprint  
case size  
R



**0402**  
footprint  
case size  
P

### FEATURES

- **0402 footprint - Nemco case size P**
- **0603 footprint - Nemco case size R**
- Lead-free
- RoHS compliant
- Capacitance range: 0.47  $\mu\text{f}$  to 22  $\mu\text{f}$
- Voltage range: 2 to 16 WVDC
- Operating temperature range -55°C to +125°C, 2/3 x Vr (linear derating) above +85°C
- Meets or exceeds EIA 535 BAAC and IECQ standards (QC300801/US0001, IS - 28)
- Surge tested for maximum robustness
- Laser marking polarity stripe
- Encapsulant material satisfies the UL 94 VO flammability classification
- MSL (moisture sensitivity level) per IPC/Jedec J-STD-020B is level 1



Lead Free



RoHS  
compliant

Capacitance (μF)	Case Size	Nemco Part No.	DCL (μA) max.	tan δ max. (%)	ESR @ 100kHz max. mΩ
<b>0402 FOOTPRINT / CASE SIZE P</b>					
<b>2 V DC @ 85°C</b>					
3.3	P	MCT3.3 / 2PM15000	0.5	8	15000
4.7	P	MCT4.7 / 2PM15000	0.5	12	15000
6.8	P	MCT6.8 / 2PM15000	0.5	6	15000
10.0	P	MCT10 / 2PM15000	0.5	15	15000
<b>3 V DC @ 85°C</b>					
2.2	P	MCT2.2 / 3PM15000	0.5	6	15000
3.3	P	MCT3.3 / 3PM15000	0.5	8	15000
4.7	P	MCT4.7 / 3PM 8000	0.5	12	8000
4.7	P	MCT4.7 / 3PM15000	0.5	12	15000
<b>6.3 V DC @ 85°C</b>					
1.0	P	MCT1.0 / 6PM15000	0.5	6	15000
2.2	P	MCT2.2 / 6PM 8000	0.5	8	8000
2.2	P	MCT2.2 / 6PM15000	0.5	8	15000
<b>10 V DC @ 85°C</b>					
0.47	P	MCT.47 / 10PM15000	0.5	6	15000
0.68	P	MCT.68 / 10PM15000	0.5	8	15000
1.0	P	MCT1 / 10PM15000	0.5	6	15000
<b>20 V DC @ 85°C</b>					
0.1	P	MCT.1 / 10PM15000	0.5	6	15000

Capacitance (μF)	Case Size	Nemco Part No.	DCL (μA) max.	tan δ max. (%)	ESR @ 100kHz max. mΩ
<b>0603 FOOTPRINT / CASE SIZE R</b>					
<b>2 V DC @ 85°C</b>					
3.3	R	MCT3.3 / 2RM7500	0.5	6	7500
4.7	R	MCT4.7 / 2RM7500	0.5	6	7500
6.8	R	MCT6.8 / 2RM7500	0.5	6	7500
10.0	R	MCT10 / 2RM7500	0.5	10	7500
<b>3 V DC @ 85°C</b>					
2.2	R	MCT2.2 / 3RM7500	0.5	6	7500
3.3	R	MCT3.3 / 3RM7500	0.5	6	7500
4.7	R	MCT4.7 / 3RM7500	0.5	6	7500
6.8	R	MCT6.8 / 3RM7500	0.5	6	7500
10.0	R	MCT10 / 3RM7500	0.5	10	7500
22.0	R	MCT22 / 3RM7500	0.7	20	7500
<b>4 V DC @ 85°C</b>					
1.5	R	MCT1.5 / 4RM7500	0.5	6	7500
2.2	R	MCT2.2 / 4RM7500	0.5	6	7500
3.3	R	MCT3.3 / 4RM7500	0.5	6	7500
4.7	R	MCT4.7 / 4RM7500	0.5	6	7500
6.8	R	MCT6.8 / 4RM7500	0.5	8	7500
10.0	R	MCT10 / 4RM7500	0.5	10	7500
15.0	R	MCT15 / 4RM7500	0.6	20	7500
22.0	R	MCT22 / 4RM5000	0.9	6	5000
22.0	R	MCT22 / 4RM7500	0.9	20	7500
<b>5 V DC @ 85°C</b>					
22.0	R	MCT22 / 5RM7500	1.1	20	7500
<b>6.3 V DC @ 85°C</b>					
1.0	R	MCT1 / 6RM7500	0.5	6	7500
1.5	R	MCT1.5 / 6RM7500	0.5	6	7500
2.2	R	MCT2.2 / 6RM7500	0.5	6	7500
3.3	R	MCT3.3 / 6RM7500	0.5	6	7500
4.7	R	MCT4.7 / 6RM7500	0.5	8	7500
6.8	R	MCT6.8 / 6RM7500	0.5	10	7500
10.0	R	MCT10 / 6RM6000	0.6	10	6000
10.0	R	MCT10 / 6RM4000	0.6	10	4000
15.0	R	MCT15 / 6RM7500	0.9	20	7500
<b>10 V DC @ 85°C</b>					
0.47	R	MCT.47 / 10RM7500	0.5	6	7500
0.68	R	MCT.68 / 10RM7500	0.5	6	7500
1.0	R	MCT1 / 10RM7500	0.5	6	7500
1.5	R	MCT1.5 / 10RM7500	0.5	6	7500
2.2	R	MCT2.2 / 10RM7500	0.5	6	7500
3.3	R	MCT3.3 / 10RM7500	0.5	8	7500
3.3	R	MCT3.3 / 10RM5000	0.5	8	5000
4.7	R	MCT4.7 / 10RM6000	0.5	10	6000
4.7	R	MCT4.7 / 10RM5000	0.5	10	5000
6.8	R	MCT6.8 / 10RM7500	0.7	20	7500
10.0	R	MCT10 / 10RM7500	1.0	20	7500
10.0	R	MCT10 / 10RM4000	1.0	20	4000
<b>16 V DC @ 85°C</b>					
0.47	R	MCT.47 / 16RM7500	0.5	6	7500
0.68	R	MCT.68 / 16RM7500	0.5	6	7500
1.0	R	MCT1 / 16RM7500	0.5	6	7500
2.2	R	MCT2.2 / 16RM7500	0.5	10	7500

Available in M (± 20%) tolerance only.

NEMCO reserves the right to supply a higher voltage rating, tighter tolerance and / or lower ESR in the same case size, to the same reliability standards.