

Q-Powder Blends Characteristics

Superior Performance in High Voltage Solid or Liquid Electrolytic Capacitors and Other Applications



Chemical purity and particle characteristics of Q-powders result in:

- Quality anodic oxide films
- Significantly lower leakage levels in solid electrolyte units
- Higher breakdown voltages
- Special pelleting and handling of the powders



Tantalum Q-Powders Spec Sheet

Q Blends	Q2	Q2 DLS	QR3 -100	QC 325	QR3	QR3A	QR7	QR12
Applications	Medical, Industrial	Medical, Industrial	Industrial	Industrial	Capacitors	Capacitors	Capacitors	Capacitors
Fisher SS Average Particle Diameter (μ)	1.0 - 4.0	2.0-3.2	4.5 - 6.5	5.7 - 9.5	4.5 - 6.5	4.5 - 6.5	7.0 - 11.0	11.5 - 14.5
Scott Bulk Density (g/in ³)	n/a	n/a	50.0 - 65.0	80.5 - 96.7	55.0 - 60.0	40.0 - 65.0	55.0 - 65.0	62.0 - 70.0
% - 325 mesh	n/a	n/a	50.0 - 90.0	min 97.0	40.0 - 60.0	40.0 - 60.0	33.0 - 60.0	max 55.0
Capacitance @1600 150V (μFV/g)	n/a	n/a	n/a	n/a	6950 - 7650	6000 - 7000		
DC Leakage @1600 150V (max) (μA/g)	n/a	n/a	n/a	n/a	3	3		
Leakage / Capacitance @1600 150V (μA/μFV)	n/a	n/a	n/a	n/a	0.4	0.4		
Voltage Breakdown @1600 (V)	n/a	n/a	n/a	n/a	180 min	180 min		
Equivalent Series Resistance @1600 150V (max) (Ω)	n/a	n/a	n/a	n/a	n/a	n/a		
Capacitance @1800 200V (μFV/g)c							3800 - 4200	2650 - 2900
DC Leakage @1800 200V (max) (μA/g)							1.5	3
Leakage / Capacitance @1800 200V (μA/μFV)							0.5	0.3
Voltage Breakdown @1800 (V)							200 min	190 min
Equivalent Series Resistance @1800 200V (max) (Ω)							10	6
Typical Chemical Analysis								
O (max ppm)	5000	4500	2400	1600	2400	2400	1700	1100
H (max ppm)	100	100	NR	19	NR	NR	9	25
C (max ppm)	99	100	35	50	35	35	35	30
N (max ppm)	99	100	60	49	60	80	60	40
Cr (max ppm)	100	NR	5	4	5	NR	5	10
Fe (max ppm)	99	100	25	19	9	NR	19	25
Na (max ppm)	99	100	1	4	1	1	1	1
Ni (max ppm)	99	100	10	19	9	80	10	10
Si (max ppm)	50	100	20	9	8	20	8	8

*Other blends available upon request

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