

QR12 Capacitor Grade Tantalum

Number PD-7055
Issue 1-05/05/2021

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Description of Product This product data sheet describes the minimum standards for Capacitor Grade Tantalum Powders manufactured by H.C. Starck, Newton, MA.

Physical Characteristics

		Min.	Max.
Fisher Subsieve Sizer FAPD [micron]		11.5	14.5
Scott Bulk Density SBD [g/in ³]		62.0	70.0
Crush [lb]	(7.5 dg)	12.0	N/A
Screen Distribution [US standard]	% +40 mesh	N/A	0
	% -325 mesh	N/A	55.0

Chemical Characteristics (ppm)

		Max.
Aluminum	[Al]	10*
Calcium	[Ca]	2
Carbon	[C]	30
Chromium	[Cr]	10
Copper	[Cu]	2
Iron	[Fe]	25
Hydrogen	[H]	10*
Molybdenum	[Mo]	5
Nickel	[Ni]	10
Niobium	[Nb]	10
Nitrogen	[N]	40
Oxygen	[O]	1100
Potassium	[K]	10
Silicon	[Si]	20
Sodium	[Na]	1
Titanium	[Ti]	5
Tungsten	[W]	40

Electrical Characteristics

Electrical Test	QC-10-1800-09	
Sinter Temp./Time	1800 C / 30'	
Voltage	200	
% Wild Anodes	0	
DCL [uA/g]	3.0 max.	
CV/g [ufV/g]	2700 min.	2900 max.
ESR [ohm]	6.0 max.	

* typical values

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VBD [V]	190 min.	
Electrical Test	QC-10-2050-06	
Sinter Temp./Time	2050 C / 30'	
Voltage	270	
% Wild Anodes		0
DCL [μ A/g]		3.0 max.
CV/g [μ fV/g]	2300 min.	2550 max.
ESR [ohm]		6.0 max.
VBD [V]	210 min.	

Hazards identification in Advertising (Directive 67/548/EEC Article 26 and Directive 1999/45/EC Article 13)
 Metal powder, flammable, n.o.s.

Rejection H.C. Starck must receive written notification of rejected material with the reason for rejection. The right is reserved to inspect rejected material at customer plant for claim validation. The material may be returned only after proper authorization.

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