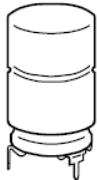


# Aluminium Electrolytic Capacitor

# Material Data Sheet

<b>Product Class</b>	<b>Soldering Star Capacitors</b>	
<b>Date</b>	<b>10/09/2019</b>	
<b>IMDS ID if available</b>	-	
<b>Version</b>	<b>08</b>	

Product Part (IMDS: semi component)	Material Class (IMDS: Material)	Material (Classification) VDA 231	Substance	TMPS** [wt%]	CAS if applicable	typical mass of material [wt-%]	Traces see 1)
<b>Active Part</b>	Light Metals	1B1	Aluminium	100	7429-90-5	35	
	Acids, Bases, Salts	6F	Ethylene glycol or Gamma-butyrolactone	65 or (90 if without NMP)	107-21-1 96-48-0	25	
	Acids, Bases, Salts	6F	1-methyl-2-pyrrolidinone (NMP) ***)	25	872-50-4		
	-	-	Others *)	10	-		
	Paper, Cardboard	5C	Cellulose	100	9004-34-6	8,7	
<b>Encapsulation</b>	Light Metals	1B1	Aluminium	99,5	7429-90-5	18,3	
	-	-	Others *)	0,5	-		
	Paper, Cardboard	5C	Cellulose	99,6	9004-34-6	1,1	
	-	-	Others *)	0,4	-		
	Duromer	2D	Phenolic resin	100	9003-35-4	2,0	
	Elastomer	2B	EPDM rubber	41,5	25038-36-2	1,8	
	Inorganic, solid	4A	Silicon dioxide	13	7631-86-9		
	Inorganic, solid	4A	Kaolinite	28,5	1318-74-7		
	Lubricant	6B	Paraffin	10,5	8012-95-1		
	-	-	Others *)	6,5	-		
	Thermoplastics	2A	PTFE	100	9002-84-0	0,1	
	Thermoplastics	2A	PET	90	25038-59-9	1,8	
	-	-	Others *)	10	-		
<b>Termination</b>	Iron and Steel	1A	Iron	99	7439-89-6	5,7	
	-	-	Others *)	1	-		
	Heavy Metals	1C12	Copper	100	7440-50-8	0,4	
	Heavy Metals	1C8	Tin	60	7440-31-5	0,1	
	Heavy Metals	1C15	Lead	40	7439-92-1		
<b>Sum in total:</b>						<b>100</b>	

sizes D x L [mm]	weight [g]	part numbers	part numbers	part numbers	part numbers	part numbers
12 x 30	5,4	B41782B8477T	B41791B8477Q	B41793A5477Q	B41794A7477Q	B41796A5338Q
14 x 25	6,1	B41782B9227T	B41792A5108Q	B41793A7108Q	B41794B5158Q	B41796A5687Q
14 x 30	7,2	B41784S8227T 1	B41792A5158Q	B41793A7158Q	B41794C5158Q	B41796A7108Q
16 x 25	7,9	B41784S8227T 4	B41792A5338Q	B41793A7337Q	B41795A5108Q	B41796A7228Q
16 x 30	9,4	B41790A5588Q	B41792A5687Q	B41793A7477Q	B41795A5158Q	B41796A7477Q
16 x 35	10,9	B41790A8477Q	B41792A7108Q	B41793A7687Q	B41795A5228Q	B41796A7687Q
16 x 39	12,2	B41791A5108Q	B41792A7228Q	B41793A8107Q	B41795A5338Q	B41796B5338Q
18 x 25	9,9	B41791A5208Q	B41792A7477Q	B41793A8227Q	B41795A5687Q	B43793A1107Q
18 x 30	11,8	B41791A5337Q	B41792A7687Q	B41793A8337Q	B41795A7108Q	B43793A1336Q
18 x 35	13,2	B41791A5477Q	B41792A8108Q	B41793A8687Q	B41795A7228Q	B43793A1476Q
18 x 39	15,4	B41791A7158Q	B41792A8227Q	B41793A9107Q	B41795A7477Q	B43793A2226Q
21 x 30	17,1	B41791A7337Q	B41792A8337Q	B41793A9157Q	B41795A7687Q	B43793A2476Q
21 x 35	18,3	B41791A7477Q	B41792A8477Q	B41793A9227Q	B41795A8108Q	B43793A2686Q
21 x 39	21,0	B41791A7687Q	B41792B5228Q	B41793A9337Q	B41795A8227Q	
21 x 49	26,0	B41791A8107Q	B41792B7158Q	B41793B9157Q	B41795A8337Q	
		B41791A8157Q	B41792B8687Q	B41794A5108Q	B41795A8477Q	
		B41791A8227Q	B41793A 107Q	B41794A5477Q	B41795S8227Q 1	
		B41791A8687Q	B41793A 227Q	B41794A7108Q	B41796A5108Q	
		B41791B5158Q	B41793A 477Q	B41794A7158Q	B41796A5158Q	
		B41791B7108Q	B41793A5108Q	B41794A7337Q	B41796A5228Q	

Not Part of a Product Class																																																																	
<b>Contact</b>	Perosa, Eduardo																																																																
<b>Division</b>	CAP GTI																																																																
<b>Address</b>	Bernardo Joaquim Ferreira, 624 – Gravataí, RS, Brazil																																																																
	Tel: +55 51 3484 7000	mailto: epqm.gc@tdk-electronics.tdk.com																																																															
<p>*) others: (not declarable or prohibited substances acc. GADSL)</p> <p>**) typical mass percentage of substance</p> <p>***) Following products present NMP:</p> <table border="0"> <tr><td>B41784S8227T 1</td><td>B41792A5687Q</td><td>B41793A7477Q</td></tr> <tr><td>B41784S8227T 4</td><td>B41792A7108Q</td><td>B41793A7687Q</td></tr> <tr><td>B41790A8477Q</td><td>B41792A7228Q</td><td>B41793A8107Q</td></tr> <tr><td>B41791A5108Q</td><td>B41792A7477Q</td><td>B41793A8227Q</td></tr> <tr><td>B41791A5208Q</td><td>B41792A7687Q</td><td>B41793A8337Q</td></tr> <tr><td>B41791A5337Q</td><td>B41792A8108Q</td><td>B41793A8687Q</td></tr> <tr><td>B41791A5477Q</td><td>B41792A8227Q</td><td>B41795A5108Q</td></tr> <tr><td>B41791A7158Q</td><td>B41792A8337Q</td><td>B41795A5158Q</td></tr> <tr><td>B41791A7337Q</td><td>B41792A8477Q</td><td>B41795A5228Q</td></tr> <tr><td>B41791A7477Q</td><td>B41792B5228Q</td><td>B41795A5338Q</td></tr> <tr><td>B41791A7687Q</td><td>B41792B7158Q</td><td>B41795A5687Q</td></tr> <tr><td>B41791A8107Q</td><td>B41792B8687Q</td><td>B41795A7108Q</td></tr> <tr><td>B41791A8157Q</td><td>B41793A 107Q</td><td>B41795A7228Q</td></tr> <tr><td>B41791A8227Q</td><td>B41793A 227Q</td><td>B41795A7477Q</td></tr> <tr><td>B41791A8687Q</td><td>B41793A 477Q</td><td>B41795A7687Q</td></tr> <tr><td>B41791B5158Q</td><td>B41793A5108Q</td><td>B41795A8108Q</td></tr> <tr><td>B41791B7108Q</td><td>B41793A5477Q</td><td>B41795A8227Q</td></tr> <tr><td>B41791B8477Q</td><td>B41793A7108Q</td><td>B41795A8337Q</td></tr> <tr><td>B41792A5108Q</td><td>B41793A7158Q</td><td>B41795A8477Q</td></tr> <tr><td>B41792A5158Q</td><td>B41793A7337Q</td><td>B41795S8227Q 1</td></tr> <tr><td>B41792A5338Q</td><td></td><td></td></tr> </table>			B41784S8227T 1	B41792A5687Q	B41793A7477Q	B41784S8227T 4	B41792A7108Q	B41793A7687Q	B41790A8477Q	B41792A7228Q	B41793A8107Q	B41791A5108Q	B41792A7477Q	B41793A8227Q	B41791A5208Q	B41792A7687Q	B41793A8337Q	B41791A5337Q	B41792A8108Q	B41793A8687Q	B41791A5477Q	B41792A8227Q	B41795A5108Q	B41791A7158Q	B41792A8337Q	B41795A5158Q	B41791A7337Q	B41792A8477Q	B41795A5228Q	B41791A7477Q	B41792B5228Q	B41795A5338Q	B41791A7687Q	B41792B7158Q	B41795A5687Q	B41791A8107Q	B41792B8687Q	B41795A7108Q	B41791A8157Q	B41793A 107Q	B41795A7228Q	B41791A8227Q	B41793A 227Q	B41795A7477Q	B41791A8687Q	B41793A 477Q	B41795A7687Q	B41791B5158Q	B41793A5108Q	B41795A8108Q	B41791B7108Q	B41793A5477Q	B41795A8227Q	B41791B8477Q	B41793A7108Q	B41795A8337Q	B41792A5108Q	B41793A7158Q	B41795A8477Q	B41792A5158Q	B41793A7337Q	B41795S8227Q 1	B41792A5338Q		
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<p><b>Important remarks:</b></p> <p>1) The declaration limit is 0.1% as defined by IEC 62474 (IEC PAS 61906). Traces are product parts, substances etc. that are below a percentage of 0.1 % by weight, if not otherwise regulated.</p> <p>2) This Material Data Sheet contains typical values of the respective products set forth herein. We expressly point out that all values and statements contained herein are based on our best present knowledge and cannot be regarded as binding statements or binding product specifications, unless otherwise explicitly agreed in writing. TDK ELECTRONICS AG AND ITS AFFILIATES HEREBY EXPRESSLY DISCLAIM ANY REPRESENTATION OR WARRANTY, WHETHER EXPRESS, IMPLIED OR STATUTORY, WITH REGARD TO THE STATEMENTS AND VALUES CONTAINED HEREIN, INCLUDING BUT NOT LIMITED TO ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR SUITABILITY FOR ANY PURPOSE.</p>																																																																	
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