

Certification of Compliance to RoHS Standards

 Date:
 17 September 2004

 Product Family:
 TPS

 Case Size:
 A

 Dielectric Type:
 Tantalum Pentoxide

 Device Type:
 Low ESR moulded surface mount tantalum capacitor

 Exemptions:
 None

Equipment: ICP AES (Integra XL2; GBC, Dandenong, Australia) Sample Wgt: 0.20 grams (analysis provided on raw materials) Analyzed Elements: Cd, Cr, Hg ,Pb

Materials Controlled by RoHS (ppm by weight)

Mass/unit (g)	Lead	Mercury	Cadmium	Hexavalent Chromium	PBB	PBDE
0,0314	5,4	0,0	0,1	<5	0*	0*
RoHS Limit (ppm)	1 000	1 000	100	1 000	1 000	1 000
Pass/Fail	Pass	Pass	Pass	Pass	Pass	Pass

* Certified by the suppliers that these materials are not intentionally added to any raw material

This product has been tested and found to be compliant with all requirements, provisions, and exemptions of EU Directive 2002/95/EC of the European Parliament and Council of 27 January 2003. on the <u>Restriction of use of certain Hazardous Substances</u> (RoHS) in electrical and electronic equipment and EU Directive 2000/53/EC regarding ELV or End of Life Vehicle.

AVX Czech Republic s.r.o. Dvorakova 328 563 01 Lanskroun Czech Republic Milan Coufal

Quality Manager

----- |/ _|

Analyzed by: Laboratory of atomic spectroscopy University of Pardubice Čs. legií 565, 532 10 Pardubice Czech Republic Ing. Tomáš Černohorský, CSc.



Certification of Compliance to RoHS Standards

Date:17 September 2004Product Family:TPSCase Size:BDielectric Type:Tantalum PentoxideDevice Type:Low ESR moulded surface mount tantalum capacitorExemptions:None

Equipment: ICP AES (Integra XL2; GBC, Dandenong, Australia) Sample Wgt: 0.20 grams (analysis provided on raw materials) Analyzed Elements: Cd, Cr, Hg ,Pb

Materials Controlled by RoHS (ppm by weight)

Mass/unit (g)	Lead	Mercury	Cadmium	Hexavalent Chromium	PBB	PBDE
0,0719	4,9	0,0	0,1	<5	0*	0*
RoHS Limit (ppm)	1 000	1 000	100	1 000	1 000	1 000
Pass/Fail	Pass	Pass	Pass	Pass	Pass	Pass

* Certified by the suppliers that these materials are not intentionaly added to any raw material

This product has been tested and found to be compliant with all requirements, provisions, and exemptions of EU Directive 2002/95/EC of the European Parliament and Council of 27 January 2003. on the <u>Restriction of use of certain Hazardous Substances</u> (RoHS) in electrical and electronic equipment and EU Directive 2000/53/EC regarding ELV or End of Life Vehicle.

AVX Czech Republic s.r.o. Dvorakova 328 563 01 Lanskroun Czech Republic

Milan Coufal Quality Manager

Analyzed by: Laboratory of atomic spectroscopy University of Pardubice Čs. legií 565, 532 10 Pardubice Czech Republic Ing. Tomáš Černohorský, CSc.



Certification of Compliance to RoHS Standards

 Date:
 17 September 2004

 Product Family:
 TPS

 Case Size:
 C

 Dielectric Type:
 Tantalum Pentoxide

 Device Type:
 Low ESR moulded surface mount tantalum capacitor

 Exemptions:
 None

Equipment: ICP AES (Integra XL2; GBC, Dandenong, Australia) Sample Wgt: 0.20 grams (analysis provided on raw materials) Analyzed Elements: Cd, Cr, Hg ,Pb

Materials Controlled by RoHS (ppm by weight)

Mass/unit (g)	Lead	Mercury	Cadmium	Hexavalent Chromium	PBB	PBDE
0,1943	12,0	0,0	0,1	<5	0*	0*
RoHS Limit (ppm)	1 000	1 000	100	1 000	1 000	1 000
Pass/Fail	Pass	Pass	Pass	Pass	Pass	Pass

* Certified by the suppliers that these materials are not intentionaly added to any raw material

This product has been tested and found to be compliant with all requirements, provisions, and exemptions of EU Directive 2002/95/EC of the European Parliament and Council of 27 January 2003. on the <u>Restriction of use of certain Hazardous Substances</u> (RoHS) in electrical and electronic equipment and EU Directive 2000/53/EC regarding ELV or End of Life Vehicle.

AVX Czech Republic s.r.o. Dvorakova 328 563 01 Lanskroun Czech Republic

Milan Coufal Quality Manager

Analyzed by: Laboratory of atomic spectroscopy University of Pardubice Čs. legií 565, 532 10 Pardubice Czech Republic Ing. Tomáš Černohorský, CSc.



Certification of Compliance to RoHS Standards

Date:17 September 2004Product Family:TPSCase Size:DDielectric Type:Tantalum PentoxideDevice Type:Low ESR moulded surface mount tantalum capacitorExemptions:None

Equipment: ICP AES (Integra XL2; GBC, Dandenong, Australia) Sample Wgt: 0.20 grams (analysis provided on raw materials) Analyzed Elements: Cd, Cr, Hg ,Pb

Materials Controlled by RoHS (ppm by weight)

Mass/unit (g)	Lead	Mercury	Cadmium	Hexavalent Chromium	PBB	PBDE
0,3725	10,4	0,0	0,1	<5	0*	0*
RoHS Limit (ppm)	1 000	1 000	100	1 000	1 000	1 000
Pass/Fail	Pass	Pass	Pass	Pass	Pass	Pass

* Certified by the suppliers that these materials are not intentionaly added to any raw material

This product has been tested and found to be compliant with all requirements, provisions, and exemptions of EU Directive 2002/95/EC of the European Parliament and Council of 27 January 2003. on the <u>Restriction of use of certain Hazardous Substances</u> (RoHS) in electrical and electronic equipment and EU Directive 2000/53/EC regarding ELV or End of Life Vehicle.

AVX Czech Republic s.r.o. Dvorakova 328 563 01 Lanskroun Czech Republic

Milan Coufal Quality Manager

Analyzed by: Laboratory of atomic spectroscopy University of Pardubice Čs. legií 565, 532 10 Pardubice Czech Republic Ing. Tomáš Černohorský, CSc.



Certification of Compliance to RoHS Standards

 Date:
 17 September 2004

 Product Family:
 TPS

 Case Size:
 E

 Dielectric Type:
 Tantalum Pentoxide

 Device Type:
 Low ESR moulded surface mount tantalum capacitor

 Exemptions:
 None

Equipment: ICP AES (Integra XL2; GBC, Dandenong, Australia) Sample Wgt: 0.20 grams (analysis provided on raw materials) Analyzed Elements: Cd, Cr, Hg ,Pb

Materials Controlled by RoHS (ppm by weight)

Mass/unit (g)	Lead	Mercury	Cadmium	Hexavalent Chromium	PBB	PBDE
0,5314	10,0	0,0	0,1	<5	0*	0*
RoHS Limit (ppm)	1 000	1 000	100	1 000	1 000	1 000
Pass/Fail	Pass	Pass	Pass	Pass	Pass	Pass

* Certified by the suppliers that these materials are not intentionaly added to any raw material

This product has been tested and found to be compliant with all requirements, provisions, and exemptions of EU Directive 2002/95/EC of the European Parliament and Council of 27 January 2003. on the <u>Restriction of use of certain Hazardous Substances</u> (RoHS) in electrical and electronic equipment and EU Directive 2000/53/EC regarding ELV or End of Life Vehicle.

AVX Czech Republic s.r.o. Dvorakova 328 563 01 Lanskroun Czech Republic

Milan Coufal Quality Manager

Analyzed by: Laboratory of atomic spectroscopy University of Pardubice Čs. legií 565, 532 10 Pardubice Czech Republic Ing. Tomáš Černohorský, CSc.



Certification of Compliance to RoHS Standards

 Date:
 17 September 2004

 Product Family:
 TPS

 Case Size:
 V

 Dielectric Type:
 Tantalum Pentoxide

 Device Type:
 Low ESR moulded surface mount tantalum capacitor

 Exemptions:
 None

Equipment: ICP AES (Integra XL2; GBC, Dandenong, Australia) Sample Wgt: 0.20 grams (analysis provided on raw materials) Analyzed Elements: Cd, Cr, Hg ,Pb

Materials Controlled by RoHS (ppm by weight)

Mass/unit (g)	Lead	Mercury	Cadmium	Hexavalent Chromium	PBB	PBDE
0,6807	10,3	0,0	0,1	<5	0*	0*
RoHS Limit (ppm)	1 000	1 000	100	1 000	1 000	1 000
Pass/Fail	Pass	Pass	Pass	Pass	Pass	Pass

* Certified by the suppliers that these materials are not intentionaly added to any raw material

This product has been tested and found to be compliant with all requirements, provisions, and exemptions of EU Directive 2002/95/EC of the European Parliament and Council of 27 January 2003. on the <u>Restriction of use of certain Hazardous Substances</u> (RoHS) in electrical and electronic equipment and EU Directive 2000/53/EC regarding ELV or End of Life Vehicle.

AVX Czech Republic s.r.o. Dvorakova 328 563 01 Lanskroun Czech Republic

Milan Coufal Quality Manager

Analyzed by: Laboratory of atomic spectroscopy University of Pardubice Čs. legií 565, 532 10 Pardubice Czech Republic Ing. Tomáš Černohorský, CSc.



Certification of Compliance to RoHS Standards

Date:17 September 2004Product Family:TPSCase Size:RDielectric Type:Tantalum PentoxideDevice Type:Low ESR moulded surface mount tantalum capacitorExemptions:None

Equipment: ICP AES (Integra XL2; GBC, Dandenong, Australia) Sample Wgt: 0.20 grams (analysis provided on raw materials) Analyzed Elements: Cd, Cr, Hg ,Pb

Materials Controlled by RoHS (ppm by weight)

Mass/unit (g)	Lead	Mercury	Cadmium	Hexavalent Chromium	PBB	PBDE
0,0100	4,7	0,1	0,1	<5	0*	0*
RoHS Limit (ppm)	1 000	1 000	100	1 000	1 000	1 000
Pass/Fail	Pass	Pass	Pass	Pass	Pass	Pass

* Certified by the suppliers that these materials are not intentionaly added to any raw material

This product has been tested and found to be compliant with all requirements, provisions, and exemptions of EU Directive 2002/95/EC of the European Parliament and Council of 27 January 2003. on the <u>Restriction of use of certain Hazardous Substances</u> (RoHS) in electrical and electronic equipment and EU Directive 2000/53/EC regarding ELV or End of Life Vehicle.

AVX Czech Republic s.r.o. Dvorakova 328 563 01 Lanskroun Czech Republic

Milan Coufal Quality Manager

Analyzed by: Laboratory of atomic spectroscopy University of Pardubice Čs. legií 565, 532 10 Pardubice Czech Republic Ing. Tomáš Černohorský, CSc.



Certification of Compliance to RoHS Standards

Date:17 September 2004Product Family:TPSCase Size:SDielectric Type:Tantalum PentoxideDevice Type:Low ESR moulded surface mount tantalum capacitorExemptions:None

Equipment: ICP AES (Integra XL2; GBC, Dandenong, Australia) Sample Wgt: 0.20 grams (analysis provided on raw materials) Analyzed Elements: Cd, Cr, Hg ,Pb

Materials Controlled by RoHS (ppm by weight)

Mass/unit (g)	Lead	Mercury	Cadmium	Hexavalent Chromium	PBB	PBDE
0,0187	5,6	0,1	0,1	<5	0*	0*
RoHS Limit (ppm)	1 000	1 000	100	1 000	1 000	1 000
Pass/Fail	Pass	Pass	Pass	Pass	Pass	Pass

* Certified by the suppliers that these materials are not intentionaly added to any raw material

This product has been tested and found to be compliant with all requirements, provisions, and exemptions of EU Directive 2002/95/EC of the European Parliament and Council of 27 January 2003. on the <u>Restriction of use of certain Hazardous Substances</u> (RoHS) in electrical and electronic equipment and EU Directive 2000/53/EC regarding ELV or End of Life Vehicle.

AVX Czech Republic s.r.o. Dvorakova 328 563 01 Lanskroun Czech Republic

Milan Coufal Quality Manager

Analyzed by: Laboratory of atomic spectroscopy University of Pardubice Čs. legií 565, 532 10 Pardubice Czech Republic Ing. Tomáš Černohorský, CSc.



Certification of Compliance to RoHS Standards

 Date:
 17 September 2004

 Product Family:
 TPS

 Case Size:
 T

 Dielectric Type:
 Tantalum Pentoxide

 Device Type:
 Low ESR moulded surface mount tantalum capacitor

 Exemptions:
 None

Equipment: ICP AES (Integra XL2; GBC, Dandenong, Australia) Sample Wgt: 0.20 grams (analysis provided on raw materials) Analyzed Elements: Cd, Cr, Hg ,Pb

Materials Controlled by RoHS (ppm by weight)

Mass/unit (g)	Lead	Mercury	Cadmium	Hexavalent Chromium	PBB	PBDE
0,0350	5,2	0,1	0,1	<5	0*	0*
RoHS Limit (ppm)	1 000	1 000	100	1 000	1 000	1 000
Pass/Fail	Pass	Pass	Pass	Pass	Pass	Pass

* Certified by the suppliers that these materials are not intentionaly added to any raw material

This product has been tested and found to be compliant with all requirements, provisions, and exemptions of EU Directive 2002/95/EC of the European Parliament and Council of 27 January 2003. on the <u>Restriction of use of certain Hazardous Substances</u> (RoHS) in electrical and electronic equipment and EU Directive 2000/53/EC regarding ELV or End of Life Vehicle.

AVX Czech Republic s.r.o. Dvorakova 328 563 01 Lanskroun Czech Republic

Milan Coufal Quality Manager

Analyzed by: Laboratory of atomic spectroscopy University of Pardubice Čs. legií 565, 532 10 Pardubice Czech Republic Ing. Tomáš Černohorský, CSc.



Certification of Compliance to RoHS Standards

 Date:
 17 September 2004

 Product Family:
 TPS

 Case Size:
 W

 Dielectric Type:
 Tantalum Pentoxide

 Device Type:
 Low ESR moulded surface mount tantalum capacitor

 Exemptions:
 None

Equipment: ICP AES (Integra XL2; GBC, Dandenong, Australia) Sample Wgt: 0.20 grams (analysis provided on raw materials) Analyzed Elements: Cd, Cr, Hg ,Pb

Materials Controlled by RoHS (ppm by weight)

Mass/unit (g)	Lead	Mercury	Cadmium	Hexavalent Chromium	PBB	PBDE
0,0966	14,5	0,0	0,1	<5	0*	0*
RoHS Limit (ppm)	1 000	1 000	100	1 000	1 000	1 000
Pass/Fail	Pass	Pass	Pass	Pass	Pass	Pass

* Certified by the suppliers that these materials are not intentionaly added to any raw material

This product has been tested and found to be compliant with all requirements, provisions, and exemptions of EU Directive 2002/95/EC of the European Parliament and Council of 27 January 2003. on the <u>Restriction of use of certain Hazardous Substances</u> (RoHS) in electrical and electronic equipment and EU Directive 2000/53/EC regarding ELV or End of Life Vehicle.

AVX Czech Republic s.r.o. Dvorakova 328 563 01 Lanskroun Czech Republic

Milan Coufal Quality Manager

Analyzed by: Laboratory of atomic spectroscopy University of Pardubice Čs. legií 565, 532 10 Pardubice Czech Republic Ing. Tomáš Černohorský, CSc.



Certification of Compliance to RoHS Standards

 Date:
 17 September 2004

 Product Family:
 TPS

 Case Size:
 X

 Dielectric Type:
 Tantalum Pentoxide

 Device Type:
 Low ESR moulded surface mount tantalum capacitor

 Exemptions:
 None

Equipment: ICP AES (Integra XL2; GBC, Dandenong, Australia) Sample Wgt: 0.20 grams (analysis provided on raw materials) Analyzed Elements: Cd, Cr, Hg ,Pb

Materials Controlled by RoHS (ppm by weight)

Mass/unit (g)	Lead	Mercury	Cadmium	Hexavalent Chromium	PBB	PBDE
0,1583	12,2	0,0	0,1	<5	0*	0*
RoHS Limit (ppm)	1 000	1 000	100	1 000	1 000	1 000
Pass/Fail	Pass	Pass	Pass	Pass	Pass	Pass

* Certified by the suppliers that these materials are not intentionaly added to any raw material

This product has been tested and found to be compliant with all requirements, provisions, and exemptions of EU Directive 2002/95/EC of the European Parliament and Council of 27 January 2003. on the <u>Restriction of use of certain Hazardous Substances</u> (RoHS) in electrical and electronic equipment and EU Directive 2000/53/EC regarding ELV or End of Life Vehicle.

AVX Czech Republic s.r.o. Dvorakova 328 563 01 Lanskroun Czech Republic

Milan Coufal Quality Manager

Analyzed by: Laboratory of atomic spectroscopy University of Pardubice Čs. legií 565, 532 10 Pardubice Czech Republic Ing. Tomáš Černohorský, CSc.



Certification of Compliance to RoHS Standards

 Date:
 17 September 2004

 Product Family:
 TPS

 Case Size:
 Y

 Dielectric Type:
 Tantalum Pentoxide

 Device Type:
 Low ESR moulded surface mount tantalum capacitor

 Exemptions:
 None

Equipment: ICP AES (Integra XL2; GBC, Dandenong, Australia) Sample Wgt: 0.20 grams (analysis provided on raw materials) Analyzed Elements: Cd, Cr, Hg ,Pb

Materials Controlled by RoHS (ppm by weight)

Mass/unit (g)	Lead	Mercury	Cadmium	Hexavalent Chromium	PBB	PBDE
0,2368	10,5	0,0	0,1	<5	0*	0*
RoHS Limit (ppm)	1 000	1 000	100	1 000	1 000	1 000
Pass/Fail	Pass	Pass	Pass	Pass	Pass	Pass

* Certified by the suppliers that these materials are not intentionaly added to any raw material

This product has been tested and found to be compliant with all requirements, provisions, and exemptions of EU Directive 2002/95/EC of the European Parliament and Council of 27 January 2003. on the <u>Restriction of use of certain Hazardous Substances</u> (RoHS) in electrical and electronic equipment and EU Directive 2000/53/EC regarding ELV or End of Life Vehicle.

AVX Czech Republic s.r.o. Dvorakova 328 563 01 Lanskroun Czech Republic

Milan Coufal Quality Manager

Analyzed by: Laboratory of atomic spectroscopy University of Pardubice Čs. legií 565, 532 10 Pardubice Czech Republic Ing. Tomáš Černohorský, CSc.



Certification of Compliance to RoHS Standards

 Date:
 17 September 2004

 Product Family:
 TPS

 Case Size:
 P

 Dielectric Type:
 Tantalum Pentoxide

 Device Type:
 Low ESR moulded surface mount tantalum capacitor

 Exemptions:
 None

Equipment: ICP AES (Integra XL2; GBC, Dandenong, Australia) Sample Wgt: 0.20 grams (analysis provided on raw materials) Analyzed Elements: Cd, Cr, Hg ,Pb

Materials Controlled by RoHS (ppm by weight)

Mass/unit (g)	Lead	Mercury	Cadmium	Hexavalent Chromium	PBB	PBDE
0,0151	5,1	0,1	0,1	<5	0*	0*
RoHS Limit (ppm)	1 000	1 000	100	1 000	1 000	1 000
Pass/Fail	Pass	Pass	Pass	Pass	Pass	Pass

* Certified by the suppliers that these materials are not intentionaly added to any raw material

This product has been tested and found to be compliant with all requirements, provisions, and exemptions of EU Directive 2002/95/EC of the European Parliament and Council of 27 January 2003. on the <u>Restriction of use of certain Hazardous Substances</u> (RoHS) in electrical and electronic equipment and EU Directive 2000/53/EC regarding ELV or End of Life Vehicle.

AVX Czech Republic s.r.o. Dvorakova 328 563 01 Lanskroun Czech Republic

Milan Coufal Quality Manager

Analyzed by: Laboratory of atomic spectroscopy University of Pardubice Čs. legií 565, 532 10 Pardubice Czech Republic Ing. Tomáš Černohorský, CSc.



Certification of Compliance to RoHS Standards

 Date:
 17 September 2004

 Product Family:
 TPS

 Case Size:
 Q

 Dielectric Type:
 Tantalum Pentoxide

 Device Type:
 Low ESR moulded surface mount tantalum capacitor

 Exemptions:
 None

Equipment: ICP AES (Integra XL2; GBC, Dandenong, Australia) Sample Wgt: 0.20 grams (analysis provided on raw materials) Analyzed Elements: Cd, Cr, Hg ,Pb

Materials Controlled by RoHS (ppm by weight)

Mass/unit (g)	Lead	Mercury	Cadmium	Hexavalent Chromium	PBB	PBDE
0,0090	3,7	0,2	0,1	<5	0*	0*
RoHS Limit (ppm)	1 000	1 000	100	1 000	1 000	1 000
Pass/Fail	Pass	Pass	Pass	Pass	Pass	Pass

* Certified by the suppliers that these materials are not intentionaly added to any raw material

This product has been tested and found to be compliant with all requirements, provisions, and exemptions of EU Directive 2002/95/EC of the European Parliament and Council of 27 January 2003. on the <u>Restriction of use of certain Hazardous Substances</u> (RoHS) in electrical and electronic equipment and EU Directive 2000/53/EC regarding ELV or End of Life Vehicle.

AVX Czech Republic s.r.o. Dvorakova 328 563 01 Lanskroun Czech Republic

Milan Coufal Quality Manager

Analyzed by: Laboratory of atomic spectroscopy University of Pardubice Čs. legií 565, 532 10 Pardubice Czech Republic Ing. Tomáš Černohorský, CSc.