

<b>Approval Certificate for RoHS Directive</b>	
RoHS 3. <b>Directive</b> (EU) 2015/863/ RoHS2 Directive 2011/65/EU (RoHS Recast) on the restriction of the use of certain hazardous substances in electrical and electronic equipment	
<b>Supplier</b>	Voltage Multipliers Inc.
<b>Manufacturing Plant</b>	8711 W. Roosevelt Ave, Visalia, CA USA 93291

The following products in Table I are RoHS compliant via Exemption 7 -

- 7 (C-I) . components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound

<b>Table I</b>	<b>Product Part Numbers</b>		
1N5415 - 1N5420	M25FG - M160FG M25SG - M160SG	SPJ100 F - SPJ450F SPJ100S - SPJ450S	Z20FF3 - Z100FF3
1N5550 - 1N5554	MR (E-Zorb) – All devices	SXF6521 - SXF6525	Z20FF5 - Z100FF5
1N5614 - 1N6523		SXF20FF3 - SXF50FF3	Z25UFG - Z100UFG
1N6513 - 1N6535	OC025	X20FF3 - X150FF3	Z25FG - Z100FG
1N6612 - 1N6619	OC100G	X20FF5 - X150FF5	Z25SG - Z100SG
1N6836 - 1N6839	OC100HG		Z150UFG
FP25F – FP150F	OC150G	X25UFG - X100UFG	Z150FG
FP25S – FP200S	OC150HG	X150UFG - X200UFG	Z150SG
FP175UF – FP250UF	OZ100SG	X25FG - X100FG X150FG - X200FG	ZR (E-Zorb) – All devices
M50FF3 - M160FF3	OZ150SG		
M50FF5 - M160FF5	OZ160SG	X25SG - X100SG	
M25UFG - M160UFG	SMF6529 - SMF6533	X150SG - X200SG	
	SMF50FF3	XR (E-Zorb) – All devices	
	SXF50FF3		
	SP25F – SP250F		
	SP25UF – SP250UF		
	SP50S – SP300S		

Based on information from our suppliers, the substances listed below, which are restricted by the 2000/53/EC and 202/95/EC directives, are not included or used in a solid form as a chemical substance or contained as a component of the above mentioned products. The substances may be present at the extremely low and normal background levels found in the industrialized world.

Appearance in Table I does not guarantee product availability.

<p><b>Heavy Metals</b> Cadmium and Cadmium compounds Mercury and Mercury compounds Hexavalent chromium compounds</p> <p>Lead (Pb): See exemption and Exception: Military Devices</p>	<p><b>Brominated organic compounds</b> Polybrominated biphenyles (PBB) Polybrominated diphenyl ethers (PBDE)</p> <p><b>Bis(2-Ethylhexyl) phthalate (DEHP): max 0.1%;</b> <b>Benzyl butyl phthalate (BBP): max 0.1%;</b> <b>Dibutyl phthalate (DBP): max 0.1%;</b> <b>Diisobutyl phthalate (DIBP): max 0.1%.</b></p>
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The following products in Table II are RoHS compliant via Exemption 7 -

- 7a. Lead in high melting temperature type solders (i.e. lead based solder alloys containing 85% by weight or more lead).
- 7 (C-I) . components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound
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Approval: Based on information from our suppliers, these devices may contain high temperature/high Pb content performs or solder used in the manufacturing process, and/or contain Pb in the glass passivation.

Table II	Product Part Numbers		
Z25UF - Z100UF <sup>1</sup> Z25F - Z100F <sup>1</sup> Z25S - Z100S <sup>1</sup>	K25UF - K100UF <sup>1</sup> K25F - K100F <sup>1</sup> K25S - K100S <sup>1</sup>	MD90FF18 - MD90FF25 <sup>2</sup> MD90FF18J - MD90FF25J <sup>2</sup>  MD90U18 - MD90U25 <sup>2</sup> MD90U18J - MD90U25J <sup>2</sup>	SM6525 <sup>3</sup> SM6527 <sup>3</sup> SM6533 <sup>3</sup> SM6535 <sup>3</sup>

<sup>1</sup> - Exemption 7a  
<sup>2</sup> - Exemption 7c  
<sup>3</sup> - Exemption 7a and 7c

The substances listed below, which are restricted by the 2000/53/EC and 202/95/EC directives, are not included or used in a solid form as a chemical substance or contained as a component of the above mentioned products. The substances may be present at the extremely low and normal background levels found in the industrialized world.

Appearance in Table II does not guarantee product availability.

<p><b>Heavy Metals</b> Cadmium and Cadmium compounds Mercury and Mercury compounds Hexavalent chromium compounds</p> <p>Lead (Pb): See exemption and Exception: Military Devices</p>	<p><b>Brominated organic compounds</b> Polybrominated biphenyles (PBB) Polybrominated diphenyl ethers (PBDE)</p> <p>Bis(2-Ethylhexyl) phthalate (DEHP): max 0.1%; Benzyl butyl phthalate (BBP): max 0.1%; Dibutyl phthalate (DBP): max 0.1%; Diisobutyl phthalate (DIBP): max 0.1%.</p>
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The following products in Table III are RoHS compliant via Exemption 7 -

- 7 (C-I) . components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound
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Approval: Based on information from our suppliers, the part numbers listed above are RoHS compliant.

Table III	Product Part Numbers		
HM202P08 – HM202P10 HM202N08 – HM202N10  HM402P08 – HM402P10 HM402N08 – HM402N10	MVM202PO6  MVM302P08 - MVM302P12	MVM402P10 - MVM422P10  PVM302P08 PVM302P10 PVM302P12	VM1446 - VM1448 VM1548 VM1566 VM1724 VM1725 VM1726 VM1738

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Appearance in Table III does not guarantee product availability.

<p><b>Heavy Metals</b> Cadmium and Cadmium compounds Mercury and Mercury compounds Hexavalent chromium compounds</p> <p>Lead (Pb): See exemption and Exception: Military Devices</p>	<p><b>Brominated organic compounds</b> Polybrominated biphenyles (PBB) Polybrominated diphenyl ethers (PBDE)</p> <p><b>Bis(2-Ethylhexyl) phthalate (DEHP): max 0.1%;</b> <b>Benzyl butyl phthalate (BBP): max 0.1%;</b> <b>Dibutyl phthalate (DBP): max 0.1%;</b> <b>Diisobutyl phthalate (DIBP): max 0.1%.</b></p>
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The following products listed in Table IV are RoHS compliant via Exemption 7 -

- 7a. Lead in high melting temperature type solders (i.e. lead based solder alloys containing 85% by weight or more lead).
- 7 (C-I) . components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound

\*Diodes ending in "L" or "LL" are not compliant when the default finish is a tin/lead solder dip. Copper tabbed ending in "U" surface mount diodes are not compliant they are solder-dipped with Sn62 by default. (see the \* footnote that OC250 has a non-compliant component.)

Table IV	Product Part Numbers		
<p>56 U to 5622U</p> <p>1N6513LL - 1N6517LL 1N651 1</p> <p>OC250*</p>	<p>SRP18U</p>	<p>X06FF3L to X10FF3L X06FF5L to X10FF5L</p> <p>X02FL to X10FL X02SL to X10SL X02UL to X10UL</p> <p>X20FF3L to X50FF3L X20FF5L to X50FF5L</p>	<p>Z02FF3L to Z10FF3L Z02FF5L to Z10FF5L</p> <p>Z02FL to Z10FL Z02SL to Z10SL Z02UL to Z10UL</p> <p>Z02FLL - Z10FLL Z02SLL - Z10SLL Z02ULL to Z10ULL</p> <p>Z06FF3LL - Z10FF3LL</p>

\*They are **NOT** compliant dWAc to the WAc of tin/lead solder on terminations, or the presence of a non-compliant component.

			Z06FF5LL - Z10FF5LL Z20FF3LL - Z50FF3LL Z20FF5LL - Z50FF5LL
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\* Device uses a non-compliant component

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Appearance on this list does not guarantee product availability.

<p><b>Heavy Metals</b> Cadmium and Cadmium compounds Mercury and Mercury compounds Hexavalent chromium compounds</p> <p>Lead (Pb): See exemption and Exception: Military Devices</p>	<p><b>Brominated organic compounds</b> Polybrominated biphenyles (PBB) Polybrominated diphenyl ethers (PBDE)</p> <p><b>Bis(2-Ethylhexyl) phthalate (DEHP): max 0.1%;</b> <b>Benzyl butyl phthalate (BBP): max 0.1%;</b> <b>Dibutyl phthalate (DBP): max 0.1%;</b> <b>Diisobutyl phthalate (DIBP): max 0.1%.</b></p>
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The following products listed in Table V are excluded from the RoHS regulation.

Table V	Product Part Numbers
JANTX1N6513US – JANTX1N6517US JANTXV1N6513US – JANTXV1N6517US JANTX1N6513FL – JANTX1N6517FL JANTXV1N6513FL – JANTXV1N6517FL	JANTX/JANTXV1N6513 – JANTX/JANTXV1N6535

Appearance on this list does not guarantee product availability.

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The information contained in this document has been carefully reviewed, and is believed to be accurate. However, no responsibility is assumed for inaccuracies.



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Date: 22 August 2017  
**Updated by Karen Spano – February 2021**

A handwritten signature in cursive script that reads 'Karen Spano'.

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Karen Spano- Sales Administration  
Manager