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RoHS Lab Analysis Report and Certification



Product Description: TVS Diode SMA Suf MT T&R
Product Number: P4SMA180A

This document hereby certifies that the aforementioned product and all its associated materials, are in compliance with RoHS Directive 2011/65/EU of the European Parliament and of the Council on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

Furthermore, it is hereby reported that the aforementioned product is composed of the following materials wherein valid Eu RoHS exemptions may be indicated as applicable.

Table 1. Product material composition and applicable RoHS exemption(s)


ICP ID	Raw Material Part Number	Raw Material Description	Applicable RoHS Exemption(s)
ICP-0027	IC Wafer	Silicon Chip	
ICP-0029	Propriety	Wafer Passivation	7c-I
ICP-1778	Copper	Copper Clip	
ICP-0050	F367SN10-86D4	Solder Paste	7a
ICP-0038	Copper	Lead Frame	
ICP-0028	EME-E110G	Epoxy Molding Compound	
ICP-1787	Pure Matte Tin	Tin Plating (SMD)	

Remarks: 7a - Lead in high melting temperature type solders (lead-based alloys containing 85 % by weight or more lead)
 7c-I - Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors (piezoelectronic devices) or in a glass or ceramic matrix compound

To view the third party RoHS validation report of these materials, see download procedure below.

1. Open the FTP website on your windows explorer: ftp://pubftp.littelfuse.com/ICP_Test_Reports/
2. Retrieve the username and password thru your corresponding Sales / FAE or email envrequests@littelfuse.com
3. Find the corresponding ICP ID and download the corresponding ICP report.

Issued by: 
 DIANA JANE DE GUZMAN
 Global EHS Analyst

Noted by: 
 Arsenio M. Cesista, Jr.
 Global EHS Manager

RoHS Lab Analysis Report and Certification



Product Description: TVS Diode SMA Suf MT T&R
Product Number: P4SMA480CA

This document hereby certifies that the aforementioned product and all its associated materials, are in compliance with RoHS Directive 2011/65/EU of the European Parliament and of the Council on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

Furthermore, it is hereby reported that the aforementioned product is composed of the following materials wherein valid Eu RoHS exemptions may be indicated as applicable.

Table 1. Product material composition and applicable RoHS exemption(s)

ICP ID	Raw Material Part Number	Raw Material Description	Applicable RoHS Exemption(s)
ICP-0027	IC Wafer	Silicon Chip	
ICP-0029	Propriety	Wafer Passivation	7c-l
ICP-0038	Copper	Lead Frame	
ICP-0031	Pb:Sn:Ag=92.5:5:2.5	Solder Wafer	7a
ICP-1778	Copper	Copper Clip	
ICP-0050	F367SN10-86D4	Solder Paste	7a
ICP-0028	EME-E110G	Epoxy Molding Compound	
ICP-1787	Pure Matte Tin	Tin Plating (SMD)	

Remarks: 7a - Lead in high melting temperature type solders (lead-based alloys containing 85 % by weight or more lead)
7c-l - Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors (piezoelectronic devices) or in a glass or ceramic matrix compound

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Issued by:



Sharie Lyn S. Mantilla
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RoHS Lab Analysis Report and Certification



Product Description: TVS Diode SMA Suf MT T&R
Product Number: P4SMA68A

This document hereby certifies that the aforementioned product and all its associated materials, are in compliance with RoHS Directive 2011/65/EU of the European Parliament and of the Council on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

Furthermore, it is hereby reported that the aforementioned product is composed of the following materials wherein valid Eu RoHS exemptions may be indicated as applicable.

Table 1. Product material composition and applicable RoHS exemption(s)

ICP ID	Raw Material Part Number	Raw Material Description	Applicable RoHS Exemption(s)
ICP-0027	IC Wafer	Silicon Chip	
ICP-0029	Propriety	Wafer Passivation	7c-l
ICP-1778	Copper	Copper Clip	
ICP-0050	F367SN10-86D4	Solder Paste	7a
ICP-0038	Copper	Lead Frame	
ICP-0028	EME-E110G	Epoxy Molding Compound	
ICP-1787	Pure Matte Tin	Tin Plating (SMD)	

Remarks: 7a - Lead in high melting temperature type solders (lead-based alloys containing 85 % by weight or more lead)
7c-l - Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors (piezoelectronic devices) or in a glass or ceramic matrix compound

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RoHS Lab Analysis Report and Certification



Product Description: TVS Diode SMA Suf MT T&R
Product Number: P4SMA200A

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Furthermore, it is hereby reported that the aforementioned product is composed of the following materials wherein valid Eu RoHS exemptions may be indicated as applicable.

Table 1. Product material composition and applicable RoHS exemption(s)

ICP ID	Raw Material Part Number	Raw Material Description	Applicable RoHS Exemption(s)
ICP-0027	IC Wafer	Silicon Chip	
ICP-0029	Propriety	Wafer Passivation	7c-I
ICP-1778	Copper	Copper Clip	
ICP-0050	F367SN10-86D4	Solder Paste	7a
ICP-0038	Copper	Lead Frame	
ICP-0028	EME-E110G	Epoxy Molding Compound	
ICP-1787	Pure Matte Tin	Tin Plating (SMD)	

Remarks: 7a - Lead in high melting temperature type solders (lead-based alloys containing 85 % by weight or more lead)
7c-I - Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors (piezoelectronic devices) or in a glass or ceramic matrix compound


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RoHS Lab Analysis Report and Certification



Product Description: TVS Diode SMA Suf MT T&R
Product Number: P4SMA15A

This document hereby certifies that the aforementioned product and all its associated materials, are in compliance with RoHS Directive 2011/65/EU of the European Parliament and of the Council on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

Furthermore, it is hereby reported that the aforementioned product is composed of the following materials wherein valid Eu RoHS exemptions may be indicated as applicable.

Table 1. Product material composition and applicable RoHS exemption(s)

ICP ID	Raw Material Part Number	Raw Material Description	Applicable RoHS Exemption(s)
ICP-0027	IC Wafer	Silicon Chip	
ICP-0029	Propriety	Wafer Passivation	7c-I
ICP-1778	Copper	Copper Clip	
ICP-0050	F367SN10-86D4	Solder Paste	7a
ICP-0038	Copper	Lead Frame	
ICP-0028	EME-E110G	Epoxy Molding Compound	
ICP-1787	Pure Matte Tin	Tin Plating (SMD)	

Remarks: 7a - Lead in high melting temperature type solders (lead-based alloys containing 85 % by weight or more lead)
7c-I - Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors (piezoelectronic devices) or in a glass or ceramic matrix compound


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RoHS Lab Analysis Report and Certification



Product Description: TVS Diode SMA Suf MT T&R
Product Number: P4SMA6.8A

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Table 1. Product material composition and applicable RoHS exemption(s)


ICP ID	Raw Material Part Number	Raw Material Description	Applicable RoHS Exemption(s)
ICP-0027	IC Wafer	Silicon Chip	
ICP-0029	Propriety	Wafer Passivation	7c-I
ICP-1778	Copper	Copper Clip	
ICP-0050	F367SN10-86D4	Solder Paste	7a
ICP-0038	Copper	Lead Frame	
ICP-0028	EME-E110G	Epoxy Molding Compound	
ICP-1787	Pure Matte Tin	Tin Plating (SMD)	

Remarks: 7a - Lead in high melting temperature type solders (lead-based alloys containing 85 % by weight or more lead)
 7c-I - Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors (piezoelectronic devices) or in a glass or ceramic matrix compound

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RoHS Lab Analysis Report and Certification



Product Description: TVS Diode SMA Suf MT T&R
Product Number: P4SMA39A

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Table 1. Product material composition and applicable RoHS exemption(s)


ICP ID	Raw Material Part Number	Raw Material Description	Applicable RoHS Exemption(s)
ICP-0027	IC Wafer	Silicon Chip	
ICP-0029	Propriety	Wafer Passivation - Glass (White Powder)	7c-I
ICP-0038	Copper	Lead Frame	
ICP-1778	Copper	Copper Clip	
ICP-0050	F367SN10-86D4	Solder Paste	7a
ICP-0028	EME-E110G	Epoxy Molding Compound	
ICP-1787	Pure Matte Tin	Tin Plating (SMD)	

Remarks: 7a - Lead in high melting temperature type solders (lead-based alloys containing 85 % by weight or more lead)
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RoHS Lab Analysis Report and Certification



Product Description: TVS Diode SMA Suf MT T&R
Product Number: P4SMA350CA

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Table 1. Product material composition and applicable RoHS exemption(s)

ICP ID	Raw Material Part Number	Raw Material Description	Applicable RoHS Exemption(s)
ICP-0027	IC Wafer	Silicon Chip	
ICP-0029	Propriety	Wafer Passivation	7c-l
ICP-0038	Copper	Lead Frame	
ICP-0031	Pb:Sn:Ag=92.5:5:2.5	Solder Wafer (Silvery Solder Wafer)	7a
ICP-1778	Copper	Copper Clip	
ICP-0050	F367SN10-86D4	Solder Paste	7a
ICP-0028	EME-E110G	Epoxy Molding Compound	
ICP-1787	Pure Matte Tin	Tin Plating (SMD)	

Remarks: 7a - Lead in high melting temperature type solders (lead-based alloys containing 85 % by weight or more lead)
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RoHS Lab Analysis Report and Certification



Product Description: TVS Diode SMA Suf MT T&R
Product Number: P4SMA510A

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ICP-0027	IC Wafer	Silicon Chip	
ICP-0029	Propriety	Wafer Passivation	7c-l
ICP-0038	Copper	Lead Frame	
ICP-0031	Pb:Sn:Ag=92.5:5:2.5	Solder Wafer (Silvery Solder Wafer)	7a
ICP-1778	Copper	Copper Clip	
ICP-0050	F367SN10-86D4	Solder Paste	7a
ICP-0028	EME-E110G	Epoxy Molding Compound	
ICP-1787	Pure Matte Tin	Tin Plating (SMD)	

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