



# Final Product/Process Change Notification

Document #:FPCN24905X

Issue Date:29 Sep 2022

<b>Title of Change:</b>	To qualify new structure for SMA, SMB, SMC package series	
<b>Proposed First Ship date:</b>	05 Jan 2023 or earlier if approved by customer	
<b>Contact Information:</b>	Contact your local onsemi Sales Office or <a href="mailto:Tai.Truong@onsemi.com">Tai.Truong@onsemi.com</a>	
<b>PCN Samples Contact:</b>	Contact your local onsemi Sales Office. Sample requests are to be submitted no later than 30 days from the date of first notification, Initial PCN or Final PCN, for this change. Samples delivery timing will be subject to request date, sample quantity and special customer packing/label requirements.	
<b>Additional Reliability Data:</b>	Contact your local onsemi Sales Office or <a href="mailto:Khoa.Tran2@onsemi.com">Khoa.Tran2@onsemi.com</a>	
<b>Type of Notification:</b>	This is a Final Product/Process Change Notification (FPCN) sent to customers. FPCNs are issued 90 days prior to implementation of the change. onsemi will consider this change accepted, unless an inquiry is made in writing within 30 days of delivery of this notice. To do so, contact <a href="mailto:PCN.Support@onsemi.com">PCN.Support@onsemi.com</a>	
<b>Marking of Parts/ Traceability of Change:</b>	Clean date code advise upon request	
<b>Change Category:</b>	Assembly Change	
<b>Change Sub-Category(s):</b>	Manufacturing Process Change	
<b>Sites Affected:</b>		
<b>onsemi Sites</b>	<b>External Foundry/Subcon Sites</b>	
None	Panjit International Inc., Taiwan	
<b>Description and Purpose:</b>		
This is the Final Notification to announce the plan to qualify new structure for SMA, SMB, SMC packages in table below.		
	<b>From</b>	<b>To</b>
LeadFrame/clip	Copper L/F & Copper L/F	Copper L/F & Copper Clip
Mold compound	CCSB, EMEE110G; Hysol KL-G100S	Hysol, GR530
There is no product marking change as a result of this change.		



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## Reliability Data Summary:

**QV DEVICE NAME: RS1M (Fast Rectifiers)**

**PACKAGE: SMA**

Test	Specification	Condition	Interval	Result
HTSL	JESD22-A103	Ta = 150 °C	1008 hrs	0/77
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta = +25°C, deltaTj = 100°C max, Ton = Toff = 2min	15000 cyc	0/77
TC	JESD22-A104	Ta = -65°C to +150°C	1000 cyc	0/77
AC	JESD22-A102	121°C, 100% RH, 15psig, unbiased	96 hrs	0/77
H3TRB	JESD22-A101	Ta = 85°C, RH = 85%, bias = 100V max	1008 hrs	0/77
HTRB	JESD22-A108	Ta = 140°C, bias = 100% of rated V	1008 hrs	0/77
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/308
RSH	JESD22- B106	Ta = 265°C, 10 sec		0/30
SD	JSTD002	Ta = 245°C, 10 sec		0/15

**QV DEVICE NAME: SSA210 (Schottky Rectifiers)**

**PACKAGE: SMA**

Test	Specification	Condition	Interval	Result
HTSL	JESD22-A103	Ta = 175 °C	1008 hrs	0/77
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta = +25°C, deltaTj = 100°C max, Ton = Toff = 2min	15000 cyc	0/77
TC	JESD22-A104	Ta = -65°C to +150°C	1000 cyc	0/77
AC	JESD22-A102	121°C, 100% RH, 15psig, unbiased	96 hrs	0/77
H3TRB	JESD22-A101	Ta = 85°C, RH = 85%, bias = 80% of rated V	1008 hrs	0/77
HTRB	JESD22-A108	Ta = 100°C, bias = 100% of rated V	1008 hrs	0/77
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/308
RSH	JESD22- B106	Ta = 265°C, 10 sec		0/30
SD	JSTD002	Ta = 245°C, 10 sec		0/15

**QV DEVICE NAME: S2M (General – Purpose Rectifiers)**

**PACKAGE: SMB**

Test	Specification	Condition	Interval	Result
HTSL	JESD22-A103	Ta = 150 °C	1008 hrs	0/77
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta = +25°C, deltaTj = 100°C max, Ton = Toff = 2min	15000 cyc	0/77
TC	JESD22-A104	Ta = -65°C to +150°C	1000 cyc	0/77
AC	JESD22-A102	121°C, 100% RH, 15psig, unbiased	96 hrs	0/77
H3TRB	JESD22-A101	Ta = 85°C, RH = 85%, bias = 100V max	1008 hrs	0/77
HTRB	JESD22-A108	Ta = 140°C, bias = 100% of rated V	1008 hrs	0/77
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/308
RSH	JESD22- B106	Ta = 265°C, 10 sec		0/30
SD	JSTD002	Ta = 245°C, 10 sec		0/15



# Final Product/Process Change Notification

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**QV DEVICE NAME: S320 (Schottky Rectifiers)**

**PACKAGE: SMB**

Test	Specification	Condition	Interval	Result
HTSL	JESD22-A103	Ta = 150 °C	1008 hrs	0/77
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta = +25°C, deltaTj = 100°C max, Ton = Toff = 2min	15000 cyc	0/77
TC	JESD22-A104	Ta = -65°C to +150°C	1000 cyc	0/77
AC	JESD22-A102	121°C, 100% RH, 15psig, unbiased	96 hrs	0/77
H3TRB	JESD22-A101	Ta = 85°C, RH = 85%, bias = 100V max	1008 hrs	0/77
HTRB	JESD22-A108	Ta = 100°C, bias = 100% of rated V	1008 hrs	0/77
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/308
RSH	JESD22- B106	Ta = 265°C, 10 sec		0/30
SD	JSTD002	Ta = 245°C, 10 sec		0/15

**QV DEVICE NAME: S310 (Schottky Rectifiers)**

**PACKAGE: SMC**

Test	Specification	Condition	Interval	Result
HTSL	JESD22-A103	Ta = 150 °C	1008 hrs	0/77
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta = +25°C, deltaTj = 100°C max, Ton = Toff = 2min	15000 cyc	0/77
TC	JESD22-A104	Ta = -65°C to +150°C	1000 cyc	0/77
AC	JESD22-A102	121°C, 100% RH, 15psig, unbiased	96 hrs	0/77
H3TRB	JESD22-A101	Ta = 85°C, RH = 85%, bias = 80% of rated V	1008 hrs	0/77
HTRB	JESD22-A108	Ta = 100°C, bias = 100% of rated V	1008 hrs	0/77
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/308
RSH	JESD22- B106	Ta = 265°C, 10 sec		0/30
SD	JSTD002	Ta = 245°C, 10 sec		0/15

**Electrical Characteristics Summary:**

Electrical characteristics are not impacted.

**List of Affected Parts:**

**Note:** Only the standard (off the shelf) part numbers are listed in the parts list. Any custom parts affected by this PCN are shown in the customer specific PCN addendum in the PCN email notification, or on the [PCN Customized Portal](#).

Part Number	Qualification Vehicle
RGF1A	RS1M
RGF1B	RS1M
RGF1D	RS1M
RGF1G	RS1M
RGF1J	RS1M
RGF1K	RS1M
RGF1M	RS1M
RS1A	RS1M
RS1B	RS1M



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Document #:FPCN24905X

Issue Date:29 Sep 2022

RS1D	RS1M
RS1G	RS1M
RS1J	RS1M
RS1K	RS1M
RS1M	RS1M
GF1A	RS1M
GF1B	RS1M
GF1D	RS1M
GF1G	RS1M
GF1J	RS1M
GF1K	RS1M
GF1M	RS1M
S1A	RS1M
S1B	RS1M
S1D	RS1M
S1G	RS1M
S1J	RS1M
S1K	RS1M
S1M	RS1M
S100	SSA210
SS12	SSA210
SS13	SSA210
SS14	SSA210
SS15	SSA210
SS18	SSA210
SS19	SSA210
SSA210	SSA210
SSA24	SSA210
SSA36	SSA210
ES1A	RS1M
ES1B	RS1M
ES1C	RS1M
ES1D	RS1M
ES1F	RS1M



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Document #:FPCN24905X

Issue Date:29 Sep 2022

ES1G	RS1M
ES1H	RS1M
ES1J	RS1M
EGF1A	RS1M
EGF1B	RS1M
EGF1C	RS1M
EGF1D	RS1M
S2A	S2M
S2B	S2M
S2D	S2M
S2G	S2M
S2J	S2M
S2K	S2M
S2M	S2M
S210	S320
S320	S320
SS23	S320
SS25	S320
SS28	S320
SS29	S320
ES2A	S2M
ES2B	S2M
ES2C	S2M
ES2D	S2M
S310	S310
SS32	S310
SS33	S310
SS34	S310
SS35	S310
SS36	S310
SS38	S310
SS39	S310

**Appendix A: Changed Products**

**PCN#: FPCN24905X**  
**Issue Date: Sep 29, 2022**

DIKG: DIGI-KEY (page 1 of 2)

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
RGF1B		RS1M	NA	
RGF1G		RS1M	NA	
RGF1J		RS1M	NA	
RGF1M		RS1M	NA	
RS1A		RS1M	NA	
RS1B		RS1M	NA	
RS1D		RS1M	NA	
RS1G		RS1M	NA	
RS1J		RS1M	NA	
RS1K		RS1M	NA	
RS1M		RS1M	NA	
GF1A		RS1M	NA	
GF1B		RS1M	NA	
GF1D		RS1M	NA	
GF1G		RS1M	NA	
GF1J		RS1M	NA	
GF1K		RS1M	NA	
GF1M		RS1M	NA	
S1A		RS1M	NA	
S1B		RS1M	NA	
S1D		RS1M	NA	
S1G		RS1M	NA	
S1J		RS1M	NA	
S1K		RS1M	NA	
S1M		RS1M	NA	
S100		SSA210	NA	
SS12		SSA210	NA	
SS13		SSA210	NA	
SS14		SSA210	NA	
SS15		SSA210	NA	
SS18		SSA210	NA	
SS19		SSA210	NA	
RGF1D		RS1M	NA	
SSA24		SSA210	NA	
SSA36		SSA210	NA	
SSA210		SSA210	NA	
ES1B		RS1M	NA	
ES1A		RS1M	NA	
ES1D		RS1M	NA	
ES1F		RS1M	NA	
ES1C		RS1M	NA	
ES1H		RS1M	NA	
ES1G		RS1M	NA	
EGF1B		RS1M	NA	
ES1J		RS1M	NA	
S2A		S2M	NA	
EGF1D		RS1M	NA	
S2D		S2M	NA	
S2B		S2M	NA	
S2J		S2M	NA	
S2G		S2M	NA	
S2M		S2M	NA	
S2K		S2M	NA	
S320		S320	NA	
S210		S320	NA	
SS23		S320	NA	
SS25		S320	NA	
SS29		S320	NA	
SS28		S320	NA	
ES2B		S2M	NA	

**Appendix A: Changed Products**

**PCN#: FPCN24905X**  
**Issue Date: Sep 29, 2022**

DIKG: DIGI-KEY (page 2 of 2)

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
ES2A		S2M	NA	
ES2C		S2M	NA	
S310		S310	NA	
ES2D		S2M	NA	
SS33		S310	NA	
SS32		S310	NA	
SS35		S310	NA	
SS34		S310	NA	
SS38		S310	NA	
SS36		S310	NA	
SS39		S310	NA	