

Product Change Notification

(Notification - P1805028-DIGI)

(BL201800312)

May 21, 2018

To: *Our Valued Digi-Key Electronics Customer*

Overview: The purpose of this notification is to communicate a product change of select Renesas Electronics America, Inc. (REA) devices.

This notification announces an assembly and test site change for select Thyristor and Triac (with TO-220FP package) devices from SP Semiconductor & Communication Co., Ltd. (SP) to Advanced Semiconductor Engineering Inc. (ASE). See the Appendix for additional details.

There is a change to the part number, form & fit. There is no change to electrical characteristics or product reliability.

Affected Products: A review of our records indicates the list of products in Appendix 1 may affect your company.

Part numbers given in this list are for active part numbers in REA database at the time of this notification.

Key Dates:

Shipments from REA of product using the new assembly and test site.

August 15th, 2018

Response: No response is required. REA will consider this notification approved 30 days after its issue. If you anticipate volumes beyond your regular rate prior to the transition date, please contact your REA sales representative with a forecast of your requirements.

If the customer provides a timely acknowledgement, the customer shall have 90 days (an additional 60 days) from the date of receipt of this notification in which to make any objections to the notification. If the customer does not make any objections to this notification within 90 days of the receipt of the notification, then Renesas will consider the notification as approved. If customer cannot accept the notification, then the customer must provide Renesas with a last time buy demand and purchase order.

Please contact your REA sales representative for any questions or comments.

Thank you for your attention.

Sincerely,

Renesas Electronics America, Inc.

Appendix 1: Digi-Key Part List

Booking Part Number	Replacement PN
BCR3FM-12LB#BB0	BCR3FM-12LB#BH0
BCR3FM-12RB#BB0	BCR3FM-12RB#BH0
BCR3FM-14LB#BB0	BCR3FM-14LB#BH0
BCR5FM-12LB#BB0	BCR5FM-12LB#BH0
BCR5FM-12RB#BB0	BCR5FM-12RB#BH0
BCR5FM-14LB#BB0	BCR5FM-14LB#BH0
BCR5FM-14LJ#BB0	BCR5FM-14LJ#BH0
BCR8FM-14LJ#BB0	BCR8FM-14LJ#BH0
BCR8FM-16LB#BB0	BCR8FM-16LB#BH0
BCR8FM-20LA#BB0	BCR8FM-20LA#BH0
BCR10FM-12LB#BB0	BCR10FM-12LB#BH0
BCR10FM-14LJ#BB0	BCR10FM-14LJ#BH0
BCR12FM-12LB#BB0	BCR12FM-12LB#BH0
BCR12FM-14LJ#BB0	BCR12FM-14LJ#BH0
BCR16FM-14LJ#BB0	BCR16FM-14LJ#BH0
BCR16FR-12LB#BB0	BCR16FR-12LB#BH0
BCR20FM-12LB#BB0	BCR20FM-12LB#BH0
BCR20FM-14LJ#BB0	BCR20FM-14LJ#BH0
BCR25FM-12LB#BB0	BCR25FM-12LB#BH0
BCR25FM-14LJ#BB0	BCR25FM-14LJ#BH0
BCR25FR-12LB#BB0	BCR25FR-12LB#BH0
BCR30FM-8LB#BB0	BCR30FM-8LB#BH0
BCR30FR-8LB#BB0	BCR30FR-8LB#BH0
CR6FM-12B#BB0	CR6FM-12B#BH0
CR8FM-12B#BB0	CR8FM-12B#BH0
CR12FM-12B#BB0	CR12FM-12B#BH0

Appendix 2: Assembly Change Outline

Items		Current		New	
Package Name		TO-220FP		TO-220FPA	
Renesas PKG Code		PRSS0003AG-A		PRSS0003AP-A	
Production Site	Wafer Fab	No change (Renesas Semiconductor Manufacturing Co., Ltd. (Japan))			
	Assembly & Test	SP Semiconductor & Communication Co., Ltd. (Korea)		Advanced Semiconductor Engineering Inc. (China)	
Die		No change			
Ratings & Characteristics		No change			
Reliability		No change			
Materials	Die		No change		
	Lead frame		Cu alloy		Cu alloy
	Inner wire	T1(K)	Al		Al
		G	Al		Al
	Mold		Epoxy resin (UL94 V-0)		Epoxy resin (UL94 V-0)
	Die attach		High melting point solder		High melting point solder
	Terminal finish		Sn plating		Sn plating
RoHS		RoHS Compliant (Containing Pb exempted from EU RoHS)			
UL1557		Not applied to UL (All the products passed the inspection equivalent to the UL standard.)			
Lead forming type		Straight, A8, AS, AR		Straight, A8, AS, AR	
Packing		Straight lead type	Lead forming type	Straight lead type	Lead forming type
	Standard min. packing	Tube 50 pcs./tube	Tube 50 pcs./tube	Tube 50 pcs./tube	Tube 50 pcs./tube
	Qty / box	20 tubes / box	8 tubes / box	50 tubes / box	20 tubes / box
	box size (LxWxH)	570x155x50 (mm)	570x155x50 (mm)	575x188x94 (mm)	577x169x107 (mm)

Appendix 3: Appearance

Items	Current	New
Package Name	TO-220FP	TO-220FPA
Renesas PKG Code	PRSS0003AG-A	PRSS0003AP-A
Appearances (example)	 <p style="text-align: center;">T1 T2 G (K)(A)</p>	 <p style="text-align: center;">T1 T2 G (K)(A)</p>
Pin assignment	No change	
Marking (example)	<div style="display: flex; align-items: center;"> <div style="background-color: black; color: white; padding: 10px; text-align: center;"> <p>B S BCR8FM 14L YMW</p> </div> <div style="margin-left: 20px;"> <p>Factory code (S)</p>  </div> </div>	<div style="display: flex; align-items: center;"> <div style="background-color: black; color: white; padding: 10px; text-align: center;"> <p>B BK BCR8FM 14L YMTT</p> </div> <div style="margin-left: 20px;"> <p>Internal code(optional) Factory code (K)</p>  </div> </div>

Appendix 4a: Package Dimensions (Straight Lead Type)

Items	Current			New		
Package Name	TO-220FP			TO-220FPA		
Renesas PKG Code	PRSS0003AG-A			PRSS0003AP-A		
Package Dimensions (Unit:mm)						
Ref.	MIN	NOM	MAX	MIN	NOM	MAX
A	4.5	4.7	4.9	4.3	4.5	4.7
A1	2.56	2.76	2.96	-	2.6	-
b	0.60	0.80	1.00	0.54	0.69	0.84
b1	-	-	1.47	-	1.14	-
c	0.45	0.50	0.60	0.49	0.60	0.79
c1	2.34	2.54	2.74	2.5	2.7	2.9
D	15.67	15.87	16.07	14.7	15.0	15.3
E	9.96	10.16	10.36	9.7	10.0	10.3
e	-	-	-	2.29	2.54	2.79
e1	4.88	5.08	5.28	-	-	-
L	12.68	12.98	13.28	12.5	13.0	13.5
L1	2.98	3.18	3.38	1.65	1.95	2.25
L2	3.1	3.3	3.5	2.7	3.0	3.3
□P	3.08	3.18	3.28	3.0	3.2	3.4

Appendix 4b: Package Dimensions (Lead Forming Type)

Items	Current	New
Package Name	TO-220FP	TO-220FPA
Renesas PKG Code	PRSS0003AG-A	PRSS0003AP-A
Lead forming	A8, AS, AR	A8, AS, AR
A8	<p>Unit: mm</p>	<p>Unit: mm</p>
AS	<p>Unit: mm</p>	<p>Unit: mm</p>
AR	<p>Unit: mm</p>	<p>Unit: mm</p>