

Package Improvement for 10L and 14L
Bottombrazed Flatpack and Provide Pin 1
Marking on Old 14L Flatpacks
Qualification Results



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10L BOTTOMBRAZED FLATPACK QUALIFICATION RESULTS

In-Line Monitors and Screening Test (Reference: MIL-STD-883)

Package: 10L Bottombrazed Flatpack

Device: ADA4096S

Assembly Lot ID: E334783.1

Test Description	Test Method	Sample Size	Results	Remarks
Pre-seal Die Shear Test	2019	5 units	0/5	Pass
Wire Pull Test	2011	5 units (all wires)	0/40	Pass
Third Optical Inspection	2010/A	100%	97% (within plan yield / no failure related to package)	Pass
Temperature Cycling	1010/C	100%	100%	Pass
Constant Acceleration	2001/E	100%	100%	Pass
Final Visual Inspection	2009	100%	100%	Pass
Particle Impact Noise Detection (PIND) Test	2020/A	100%	100%	Pass
Radiographic Inspection	2012	100%	93% (within plan yield / no failure related to package)	Pass
Fine Leak Test	1014/A	100%	100%	Pass
Gross Leak Test	1014/C	100%	100%	Pass

Reliability Tests (Reference: MIL-STD-883)

Package: 10L Bottombrazed Flatpack

Device: ADA4096S

Test Lot ID: E338408.9

Test Description	Test Method	Qty (Accept #)	Sample Size	No. of Rejects	Remarks
SUBGROUP 1		15 (0)			
Physical Dimensions	2016		15	0	Pass
SUBGROUP 2		45 (0) for Leads from 3 devices min			
Lead Integrity	2004/B2		45 leads	0	Pass
Fine Leak Test	1014/A		5	0	Pass
Gross Leak Test	1014/C		5	0	Pass
SUBGROUP 3		15 (0)			
Test @ +25C			15	0	Pass
Thermal Shock	1011/B		15	0	Pass
Temperature Cycle	1010/C		15	0	Pass
Moisture Resistance	1004		15	0	Pass
Visual Inspection	1004/1010		15	0	Pass
Test @ +25C			15	0	Pass
Test @ -55C			15	0	Pass
Test @ +125C			15	0	Pass
Fine Leak Test	1014/A		15	0	Pass
Gross Leak Test	1014/C		15	0	Pass

Reliability Tests (Reference: MIL-STD-883)

Test Description	Test Method	Qty (Accept #)	Sample Size	No. of Rejects	Remarks
SUBGROUP 4		15 (0)			
Test @ +25C			15	0	Pass
Mechanical Shock	2002/B		15	0	Pass
Vibration Variable Frequency	2007/A		15	0	Pass
Constant Acceleration	2001/E		15	0	Pass
Fine Leak Test	1014/A		15	0	Pass
Gross Leak Test	1014/C		15	0	Pass
Visual Exam	2007		15	0	Pass
Test @ +25C			15	0	Pass
Test @ -55C			15	0	Pass
Test @ +125C			15	0	Pass
SUBGROUP 5		15 (0)			
Salt Atmosphere	1009/A		15	0	Pass
Visual Exam	1009		15	0	Pass
Fine Leak Test	1014/A		15	0	Pass
Gross Leak Test	1014/C		15	0	Pass
SUBGROUP 6		3 (0)			
Internal Water Vapor Content	1018		3	0	Pass
SUBGROUP 7		15 (0)			
Adhesion of Lead Finish	2025		15 Leads	0	Pass

14L BOTTOMBRAZED FLATPACK QUALIFICATION RESULTS

In-Line Monitors and Screening Test (Reference: MIL-STD-883)

Package: 14L Bottombrazed Flatpack

Device: ADA4077-4S

Assembly Lot ID: E364232.1

Test Description	Test Method	Sample Size	Results	Remarks
Pre-seal Die Shear Test	2019	5 units	0/5	Pass
Wire Pull Test	2011	5 units (all wires)	0/70	Pass
Third Optical Inspection	2010/A	100%	96.75% (within plan yield / no failure related to package)	Pass
Temperature Cycling	1010/C	100%	100%	Pass
Constant Acceleration	2001/E	100%	100%	Pass
Final Visual Inspection	2009	100%	100%	Pass
Particle Impact Noise Detection (PIND) Test	2020/A	100%	100%	Pass
Radiographic Inspection	2012	100%	97% (within plan yield / no failure related to package)	Pass
Fine Leak Test	1014/A	100%	100%	Pass
Gross Leak Test	1014/C	100%	100%	Pass

Reliability Tests (Reference: MIL-STD-883)

Package: 14L Bottombrazed Flatpack

Device: ADA4077-4S

Test Lot ID: E365423.1

Test Description	Test Method	Qty (Accept #)	Sample Size	No. of Rejects	Remarks
SUBGROUP 1		15 (0)		TBD	Available by Feb. 2021
Physical Dimensions	2016		15		
SUBGROUP 2		45 (0) for Leads from 3 devices min		TBD	Available by Feb. 2021
Lead Integrity	2004/B2		45 leads		
Fine Leak Test	1014/A		5		
Gross Leak Test	1014/C		5		
SUBGROUP 3		15 (0)		TBD	Available by Feb. 2021
Test @ +25C			15		
Thermal Shock	1011/B		15		
Temperature Cycle	1010/C		15		
Moisture Resistance	1004		15		
Visual Inspection	1004/1010		15		
Test @ +25C			15		
Test @ -55C			15		
Test @ +125C			15		
Fine Leak Test	1014/A		15		
Gross Leak Test	1014/C		15		

Reliability Tests (Reference: MIL-STD-883)

Test Description	Test Method	Qty (Accept #)	Sample Size	No. of Rejects	Remarks
SUBGROUP 4		15 (0)		TBD	Available by Feb. 2021
Test @ +25C			15		
Mechanical Shock	2002/B		15		
Vibration Variable Frequency	2007/A		15		
Constant Acceleration	2001/E		15		
Fine Leak Test	1014/A		15		
Gross Leak Test	1014/C		15		
Visual Exam	2007		15		
Test @ +25C			15		
Test @ -55C			15		
Test @ +125C			15		
SUBGROUP 5		15 (0)		TBD	Available by Feb. 2021
Salt Atmosphere	1009/A		15		
Visual Exam	1009		15		
Fine Leak Test	1014/A		15		
Gross Leak Test	1014/C		15		
SUBGROUP 6		3 (0)		TBD	Available by Feb. 2021
Internal Water Vapor Content	1018		3		
SUBGROUP 7		15 (0)		TBD	Available by Feb. 2021
Adhesion of Lead Finish	2025		15 Leads		