

**Reltronix Ltd**

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MIL PRF 38534 CLASS H TRAVELLER

Customer:SiS	Cust PO#:INTERNAL	Cust Spec:MAN DATA SHEET
LQH #:052	Bonding Diagram#: DBD067	SO:INTERNAL
Device:BAT54	Device IIL:5423	Diff Lot: 9GDV-6728 W4
Bond Wire:Au	Package Style: TO39	Package IIL:6316
Die Attach Type:Ag	Lid Style: TO39 Cap	Lid IIL:6315

SEQ	OPERATION/PS	CONDITIONS	QTY	ACCEPT	REJ.	DATE	SIG.	COMMENTS
1	100% Die Visual QS011	MIL STD 883 TM 2010	15	15		01/04/25	SG	Equipment #:1
2	Die Attach PS0018	Cure Epoxy 1Hr @150°C Oven Temp Check:152°C	15	15		02/04/25	DPB	Equipment #:6
3	Wire Bond PS0020	Wire Type: Au Diameter: 1 Mils	15	15		02/04/25	DPB	Equipment #:7
4	Internal Visual QS0029	MIL STD 883 TM 2010	15	15		02/04/25	SE	Equipment #:1
5	Lid Seal PS 00010	Cure Epoxy 1Hr @150°C	15	15		03/04/25	SR	Equipment #:8 Oven Temp Check:152°C
6	100% Electrical Test +25°C	Manufacturers Datasheet	10	10		06/04/25	DPB	Equipment #:12 Program: BAT54 25C.tsf
7	100% Electrical Test -55°C	Manufacturers Datasheet	10	10		06/04/25	DPB	Equipment #:12 Program: BAT54 -55C.tsf

ALL ELECTRICAL TEST RESULTS ARE SUPPLIED ELECTRONICALLY

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SEQ	OPERATION/PS	CONDITIONS	QTY	ACCEPT	REJ.	DATE	SIG.	COMMENTS
8	100% Electrical Test +125°C	Manufacturers Datasheet	10	10		07/04/25	DPB	Equipment #:12 Program: BAT54 125C.tsf
9	Bond Pull Test Bake PS0005	MIL STD 883 TM2011 1hr 300°C bake	10	10		08/04/25	DPB	Equipment #:8 Oven Temp Check# 301°C
10	Bond Pull Test PS0004	MIL STD 883 TM2011 Attach Electronic Results to Folder	10	10		08/04/25	DPB	Equipment #:15 BPR:0069
11	Final QA QS0032	Check Test Records and Documentation	10	10		08/04/25	DSB	
12	Dispatch goods and Electronic Records to customer		1	1		08/04/25	RB	

ALL ELECTRICAL TEST RESULTS ARE SUPPLIED ELECTRONICALLY

Data

Device #	1.1 VR @ IR = 10uA	2.1 VF @ IF = 0.1mA	3.1 VF @ IF = 1mA	4.1 VF @ IF = 10mA	5.1 VF @ IF = 30mA	6.1 VF @ IF = 100mA	7.1 IR @ VR = 25V
Unit	V	mV	mV	mV	mV	mV	uA
Lower limit	30.000	0.000	0.000	0.000	0.000	0.000	
Upper limit	60.000	240.000	320.000	400.000	500.000	800.000	2.000
1	49.14	224.00	285.50	356.75	410.00	523.75	0.09
2	49.13	219.25	281.00	353.00	406.75	523.00	0.11
3	49.14	221.50	282.75	354.75	408.00	522.75	0.10
4	49.15	221.50	283.25	355.00	408.00	523.75	0.10
5	49.15	220.25	282.00	354.00	408.00	526.25	0.11
6	49.15	216.00	277.75	350.25	403.00	519.00	0.13
7	49.15	219.50	281.25	353.50	407.25	523.25	0.11
8	49.15	217.25	279.25	351.75	405.50	522.50	0.12
9	47.90	216.50	279.25	351.75	405.75	523.50	0.13
10	49.13	218.25	280.00	352.25	406.00	539.25	0.12

Cust Spec :MAN DATA SHEET

LQH #:052

TEMP =25°C



Data

Device #	1.1 VR @ IR = 10uA	2.1 VF @ IF = 0.1mA	3.1 VF @ IF = 1mA	4.1 VF @ IF = 10mA	5.1 VF @ IF = 30mA	6.1 VF @ IF = 100mA	7.1 IR @ VR = 25V
Unit	V	mV	mV	mV	mV	mV	uA
Lower limit	30.000	0.000	0.000	0.000	0.000	0.000	
Upper limit	60.000	240.000	340	400.000	500.000	800.000	2.000
1	49.09	282.75	337.00	399.75	445.25	541.75	0.01
2	49.31	260.50	317.50	383.50	431.25	534.00	0.01
3	49.29	270.00	325.75	390.50	437.50	538.00	0.01
4	49.33	269.75	325.50	390.25	438.00	539.50	0.01
5	49.33	253.25	311.25	378.25	427.50	533.00	0.02
6	49.32	258.65	318.50	382.75	427.50	524.25	0.02
7	48.03	271.50	327.25	391.75	438.25	538.25	0.01
8	49.34	255.50	313.25	379.75	428.00	532.50	0.02
9	49.34	254.75	312.75	379.75	428.00	532.50	0.02
10	49.32	256.6	318.75	380.21	427.18	526.35	0.01

Cust Spec :MAN DATA SHEET

LQH #:052

TEMP =-55°C



Data

Device #	Result	1.1 VR @ IR = 10uA	2.1 VF @ IF = 0.1mA	3.1 VF @ IF = 1mA	4.1 VF @ IF = 10mA	5.1 VF @ IF = 30mA	6.1 VF @ IF = 100mA	7.1 IR @ VR = 25V
Unit		V	mV	mV	mV	mV	mV	uA
Lower limit		30.000	0.000	0.000	0.000	0.000	0.000	
Upper limit		60.000	240.000	320.000	400.000	500.000	800.000	20
1	Pass	35.64	122.50	195.50	282.75	350.25	501.75	12.93
2	Pass	39.10	153.00	222.50	304.75	367.50	507.25	12.17
3	Pass	34.30	92.75	168.25	259.75	331.00	492.00	13.59
4	Pass	38.85	126.00	198.25	285.75	353.50	508.75	13.16
5	Pass	36.80	96.75	171.50	262.75	334.25	495.50	13.57
6	Pass	34.45	134.00	205.75	291.00	356.75	504.50	12.59
7	Pass	39.59	108.75	183.00	272.50	342.00	498.75	12.75
8	Pass	38.91	119.75	192.75	280.50	348.50	501.75	12.73
9	Pass	35.12	111.00	184.50	273.75	342.50	498.00	12.85
10	Pass	38.96	107.50	181.50	271.50	342.00	501.00	12.33

Cust Spec :MAN DATA SHEET

LQH #:052

TEMP =125°C



Part #	BAT54	Date	8 th April 2025
Sample Qty	5	Bond Type	Ball
Wire Size	25μ	Wire Type	Au
Min allowable strength	2.5gm	BPR	0069
Customer	SIS	Customer PO- SO	
Batch #	LQH0052	Equipment	XYZTEC

SN: 11			SN: 12			SN: 13			SN: 14			SN: 15					
#	F	C	#	F	C	#	F	C	#	F	C	#	F	C	#	F	C
1	5.02	8	3	4.73	8	5	4.39	8	7	4.6	8	9	3.92	8			
2	4.54	8	4	4.69	8	6	3.99	8	8	4.42	8	10	4.75	8			

F=Pull Strength in gms C=Failure Code

CODES

1. No Wire Break
2. Bond lift from Die
3. Bond lift from Post
4. Wire breaks at Heal
5. Die Metallisation delaminates
6. No Connection
7. Wire Breaks from Die
8. Bond Breaks at span