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FABRICATION NOTES

- FABRICATE IN ACCORDANCE WITH IPC-6012 CLASS 2.
- MATERIAL: FL-GFN (AR) C1/C1 B1A OR BETTER PER IPC-4104B/126. FLAME RESISTANT (UL94V-0 OR BETTER). CAF RESISTANT. Tg RATING: 170C MINIMUM. Td RATING 340C MINIMUM. CTE-Z (ppm/C) RATING: 3.5% MAXIMUM. T260 RATING: 30 MIN. MINIMUM. T288 RATING: 10 MIN. MINIMUM.
- MATERIAL: ISOLA 370HR OR EQUAL
- COMPLIANCE: PWB SHALL BE RoHS COMPLIANT. ALL MATERIALS COMPRISING THIS PWB, INCLUDING, BUT NOT LIMITED TO, LAMINATES, PREPREGS, INKS, COATINGS AND FINISHES SHALL BE RoHS COMPLIANT. MUST MEET THE CURRENT EU DIRECTIVES FOR RoHS AND REACH COMPLIANCY AT TIME OF ORDER
- PWB SHALL BE LEAD-FREE ASSEMBLY-PROCESS COMPATIBLE.
- SURFACE FINISH: ENIG
- BOARD FABRICATOR SHALL NOT APPLY ID MARKING, LOGO OR DATE CODE TO THE PCB.
- CONSTRUCTION TO BE SMOBC, USING LIQUID PHOTOIMAGABLE (LPI) SOLDER MASK MATERIAL. APPLY TO BOTH EXTERNAL LAYERS IN ACCORDANCE WITH IPC-SM-840, (TYPE B, CLASS 2). USE APPROPRIATE SOLDER MASK ARTWORK FOR EACH SIDE OF BOARD
- SOLDER MASK MISREGISTRATION SHALL NOT EXCEED +/- 0.0025 IN. NO SOLDER MASK MATERIAL PERMISSIBLE ON SMD LANDS.
- SOLDER MASK THICKNESS: 0.0002 IN MIN. / 0.002 IN. MAX. SOLDER MASK MATERIAL TO BE MATTE OR SEMI-MATTE GREEN IN COLOR
- DRILL BOARDS USING DRILL DATA, DRILL PATTERN AND HOLE SCHEDULE. THROUGH HOLE LOCATIONS MAY VARY WITHIN 0.004 IN. (RADIAL ERROR) MAX. ABOUT TRUE POSITION. MICRO AND BLIND VIAS MAY VARY WITHIN 0.001IN. (RADIAL ERROR) MAX ABOUT TRUE POSITION.
- ALL HOLES ARE PLATED-THROUGH UNLESS NOTED OTHERWISE. MINIMUM COPPER PLATING IN PLATED HOLES TO BE 0.001 IN. COPPER PLATING SHALL NOT PLUG HOLES CLOSED
- MINIMUM ANNULAR RING = 0.005 IN.
- ADDITION OF FILLETS AT LINE/PAD INTERFACE IS DESIRED.
- FINISHED LINE WIDTH TOLERANCE = +/- 0.001 IN.
- MINIMUM FINISHED SPACING = 0.006 IN.
- MINIMUM LINE WIDTH = 0.006 IN.
- DIMENSIONS ARE IN INCHES AFTER ETCHING AND PLATING AND ARE BASIC UNLESS OTHERWISE STATED
- BOW AND TWIST SHALL NOT EXCEED 0.0075 IN. PER IN. MEASURED IN ACCORDANCE WITH IPC-TM-650, METHOD 2.4.22
- ALL ARTWORK AND DATA MAY BE ADJUSTED BY THE PCB FABRICATOR TO COMPENSATE FOR MANUFACTURING PROCESS TOLERANCES.
- SILKSCREEN TOP AND BOTTOM SIDES OF BOARD USING WHITE EPOXY BASE INK AND APPROPRIATE ARTWORK. SILKSCREEN SHALL BE TRIMMED FROM ALL UNMASKED SMD PADS.
- FINISHED BOARD THICKNESS (OVER PLATING) = 0.064 INCH +/- 10%.

Drill Drawing View (scale 8:1)



Drill Table

Symbol	Count	Hole Size	Plated	Hole Tolerance
□	15	15.0mil	Plated	+/-3.0mil
☆	4	40.2mil	Plated	+/-3.0mil
	19 Total			

Layer Stack Legend

Material	Layer	Thickness	Dielectric Material	Type	Gerber
	Top Overlay			Legend	GTO
	Surface Material	Top Solder	1.00mil	Solder Resist	Solder Mask GTS
	Copper	Top Layer	1.40mil	Signal	GTL
			60.00mil	FR-4	Dielectric
	Copper	Bottom Layer	1.40mil	Signal	GBL
	Surface Material	Bottom Solder	1.00mil	Solder Resist	Solder Mask GBS
	Bottom Overlay			Legend	GBO
Total thickness: 64.80mil					

		UNLESS OTHERWISE SPECIFIED:		NAME	DATE	NAL RESEARCH		
		DIMENSIONS ARE IN INCHES	DRAWN	MDY	7/15/2024	TITLE PRINTED WIRING BOARD 7ARB-Battery.PrjPcb		
		TOLERANCES:	CHECKED					
		FRACTIONAL ±	ENG APPR.					
		ANGULAR: MACH ± BEND ±	MFG APPR.					
		TWO PLACE DECIMAL ±	Q.A.			COMMENTS:		
		THREE PLACE DECIMAL ±	INTERPRET GEOMETRIC TOLERANCING PER:					
		MATERIAL				SIZE	DWG. NO.	REV
NEXT ASSY	USED ON	FINISH					101-24005-001	A
APPLICATION		DO NOT SCALE DRAWING				SCALE: 1:1	WEIGHT:	SHEET 1 OF 1