



□	31	31.496mil	0.8mm	PTH
○	9	39.37mil	1mm	PTH
*	2	62.992mil	1.6mm	PTH
▽	8	66.929mil	1.7mm	PTH
○	4	118.11mil	3mm	PTH
✕	2	122.047mil	3.1mm	PTH
	56	Total		

VIEWED FROM PRIMARY SIDE

NOTES:

- MATERIAL :
 - FR4, COLOUR GREEN, B-STAGE PREPREG
 - EXTERNAL LAYERS: 35um COPPER CLAD
 - FINISHED THICKNESS: 1.6mm +/- 0.1mm
- DRILLING :
 - DRILL SIZE TOLERANCE UP TO 1.25mm +0.1mm/-0.05mm.
(+/-0.1mm ACCEPTABLE FOR VIAS)
 - HOLE LOCATIONS NOT TO EXCEED 0.05mm FROM TRUE POSITION.
 - SEE DRILL TABLE FOR HOLE SIZES AND PLATING REQUIREMENTS.
- PLATING :
 - MINIMUM PLATING IN HOLES = 25um
 - MINIMUM TOTAL COPPER THICKNESS ON EXTERNAL LAYERS AFTER PLATING = 35um
- ETCHING :
 - LAYER TO LAYER MIS-REGISTRATION NOT TO EXCEED 75um FROM TRUE POSITION.
 - ETCHED PATTERN TO BE WITHIN +/- 12um OF FILM PATTERN.
- SOLDERMASK : PRIMARY SIDE ONLY
 - SOLDERMASK TO BE LIQUID PHOTOIMAGEABLE (LPI), COLOUR GREEN.
 - SOLDERMASK IS NOT PERMITTED IN COMPONENT HOLES OR ON COMPONENT PADS.
 - SOLDERMASK SHOULD WITHSTAND A MINIMUM OF 500 VDC OF BREAKDOWN VOLTAGE
 - NO SOLDER PICK UP/WICKING DURING WAVE SOLDER.
 - MEETS A MINIMUM INSULATION RESISTANCE OF 500 MEGAOHMS.
 - THE THICKNESS SHALL BE A MINIMUM OF 18um, MAXIMUM OF 63um (25um NOMINAL)
- SILKSCREEN :
 - SILKSCREEN TO BE WHITE EPOXY INK ON PRIMARY SIDE.
 - INK IS NOT PERMITTED IN COMPONENT HOLES OR ON COMPONENT PADS.
- FINISH :
 - ORGANIC SILVER FINISH (IMMERSION SILVER WITH CO-DEPOSITED OSP) TO 0.12um
 - FINISHED SURFACE TO BE FREE OF BUBBLES, BLISTERS, AND SOLDER BUILD-UP
- MINIMUM CONDUCTOR WIDTH USED ON THIS DESIGN IS 1.0mm
MINIMUM CLEARANCE IS 0.45mm. TYPICAL CLEARANCE IS 0.5mm.
- VENDOR CODE, UL RATING, AND DATE CODE TO BE SHOWN ON SECONDARY SIDE AT LOCATION SHOWN.
- MAXIMUM CAMBER ALLOWED IS 0.01 mm/mm

FILM SET LIST	
DESCRIPTION	FILE
PASTE MASK PRIMARY	2005001-001.PMP
SILKSCREEN PRIMARY	2005001-001.SSP
SOLDER RESIST PRIMARY	2005001-001.SRP
PRIMARY SIDE	2005001-001.L01
SECONADRY SIDE	2005001-001.L02
BOARD OUTLINE	2005001-001.BRD
NC DRILL DATA	2005001-001.DRL
NC DRILL DATA LIST	2005001-001.LST

AMSAT NEW ZEALAND	MATERIAL: 1	TITLE FABRICATION RECEIVER PRE-AMP	
	FINISH: 3 5 7	DWG Nr	KCH-2005001-001
	DO NOT SCALE DRAWING		Rev 1.0