

NOTES: REMOVE BURRS AND SHARP EDGES 25 MAX
INTERPRET PER ASME Y14.5-2009

REV	REVISION DESCRIPTION	DATE
1.0	RE-DRAWN WITH VALVE TITLEBLOCKS.	19-DEC-2016

NOTES	(FOR FABRICATION ISSUES ONLY):
1. ACCEPTABILITY:	PRINTED WIRING BOARD SHALL MEET THE REQUIREMENTS OF IPC-6013 CLASS 2.
2. MATERIAL:	PRINTED WIRING BOARD SHALL BE TYPE 1, MINIMUM EPOXY RESIN STRENGTH AND UL 94V-0 RATING. MATERIAL SHALL BE TYPE 1, MINIMUM EPOXY RESIN STRENGTH AND UL 94V-0 RATING. MATERIAL SHALL ALSO MEET THE RELIABILITY REQUIREMENTS OF MIL-PRC-139 FOR 100% INSULATION RESISTANCE.
3. CLEANLINESS:	PRINTED WIRING BOARD CLEANING SHALL MEET 1-STD-001 PERIOD TO ALLOW FOR CLEANING OF BOARD.
4. SOLDER MASK:	SHALL MEET REQUIREMENTS OF IPC-SM-840 CLASS 1 COLOUR GREEN.
5. FINISH:	IMMERSION GOLD.
6. SILVERSCREEN:	NON-CONDUCTIVE EPOXY INK, WHITE COLOUR CLEAR SILVERSCREEN OVER THROUGH HOLES AND ANY FUNCTIONAL VIAS (TEST POINTS).
7. BOM AND THWIST:	SHALL NOT EXCEED 0.75% OF MAXIMUM DIMENSION WHEN TESTED ACCORDING TO IPC-6013.
8. HOLES:	PLATED THROUGH HOLES SHALL MEET THE REQUIREMENTS OF IPC-2221
9. ENVIRONMENTAL:	THE JOB SUPPLIER SHALL PROVIDE A SIGNED CERTIFICATE OF COMPLIANCE NOT FURNISHING TESTS/TESTS TO BE DONE. THE CERTIFICATE OF COMPLIANCE FINAL PRODUCT MUST BE REAPPROVED BY THE CUSTOMER.
10. INNER LAYER PADS:	ALL UNUSED PADS ON THE INNER LAYERS SHOULD BE REMOVED.
11. ANTIPLAS:	ALL UNUSED DIMENSION ON THE INNER LAYER MUST NOT VARY MORE THAN +/-0.004 INCH.
12. PAD TOLERANCE:	ALL OUTSIDE LAYER PADS WITH A DIMENSION OF 0.05 INCH OR LESS, 0.05 INCH OR MORE SHOULD BE +/-0.003 INCH TOLERANCE. THE TOLERANCE OF THE PADS SHOULD FOLLOW THE DIMENSIONS OF THE PADS.
13. VIA ANNUAL RING:	IF THE VIA ANNUAL RING IS USED, THE VIA ANNUAL RING SHALL BE USED WITH DIMENSIONS OF 0.05 INCH OR LESS THAN 0.05 INCH AS A RECOMMENDED ANNUAL RING.
14. VIAS	INDUPEANCE TESTING REQUIRED.

4 LAYER CROSS SECTION BUILD

	SOLDER MASK		1/2 OZ PLATING (NICKEL/PALETTE)
TOP			
	70-4 (1.54 MIL)	0.006 MM (0.000 MILS)	
LAYER 2			1 OZ MOUNTING
	70-4 (1.64 MIL)	0.020 MM (0.000 MILS)	
LAYER 3			1 OZ MOUNTING
	70-4 (1.54 MIL)	0.006 MM (0.000 MILS)	
BOTTOM			1/2 OZ PLATING (NICKEL/PALETTE)
	SOLDER MASK		

TOTAL THICKNESS AFTER PLATING TO BE 0.40 mm [31 mils] ± 0.08 mm [3 mils]

AS MEASURED AT GOLD PLATED FINISHERS (IF PRESENT ON BOARD)

FOR SPECIFIC CONTACT, ADVISE ON FILE CORRELATION

THICKNESS WITHIN A MAXIMUM OF ±0.05 mm

PROMOTES THICKNESS TO A MAXIMUM OF ±0.025 mm [1 mils]

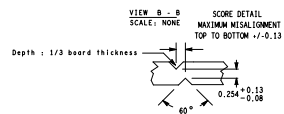
AND FURTHER REDUCES PLATING DEFECTS AND FILE CORRELATION


TOLERANCES (unless otherwise specified)		
0.X	0.XX	ANGLES
± 0.3	± 0.13	$\pm 5^\circ$

ALL DIMENSIONS APPLY AFTER FINISHING
ALL DIMENSIONS IN MILLIMETERS

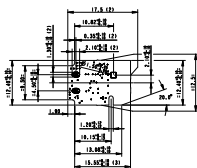
M1	MICROSTRIP IMPEDANCE	
	50 ohms +/- 10%	
	Trace Width:	0.3632 mm
	On Layers:	1,4
	Referenced to:	2,3
Note:		

M1	MICROSTRIP IMPEDANCE	
	90 ohms +/- 10%	
	Trace Width:	0.1829 mm
	On Layers:	1,4
	Referenced to:	2,3
Note: USB		



DRILL CHART: TOP to BOTTOM					
ALL UNITS ARE IN MILLIMETERS					
FIGURE	SIZE	TOLERANCE	PLATING	TYPE	QTY
	0.25	+0.000 -0.150	PLATED	Drill	57
	1.50	+/-0.05	NON-PLATED	Drill	1
TOTAL HOLES:					58

DRILL CHART: TOP to BOTTOM				
ALL UNITS ARE IN MILLIMETERS				
FIGURE	SIZE	TOLERANCE	PLATING	QTY
(CA)	2.80 x 1.30	+/-0.00	PLATED	5161 2
TOTAL HOLES:				2



FAB DRAWING
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	UNLESS OTHERWISE SPECIFIED: DIMS ARE IN MM	DRAWN	DATE 19-DEC-2016	VALVE		RELEASE STATE	FRAME D
	TOLERANCES ARE ANGULAR +/- 1deg .xx = +/- .10	CHECK		TITLE			
TREATMENT		DESIGN		WIRELESS RECEIVER			
	LEGEND □ = CRITICAL DIMENSION △ = TOOLING DIMENSION ○ = PROCESS DIMENSION XXX = DIMENSION ID X.X = REVISION FLAG	APPROVED		SIMILAR	TYPE	DWG NO VAL-500-000019-R01	
MATERIAL		THIRD ANGLE PROJECTION				SHT	1 of 1