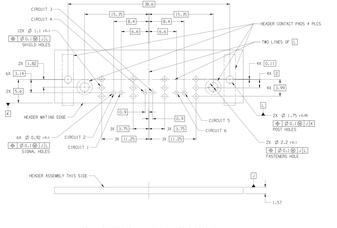
RECOMMENDED PCB LAYOUT - SOLDER SIDE PCB
POSITIVE INSERTION FORCE OPTION
SEE NOTE #14 FOR DETAILS
ZERO INSERTION FORCE OPTION
SAME AS POSITIVE INSERTION FORCE OPTION EXCEPT AS SHOWN
SEE NOTE #14 FOR DETAILS
CENTER OF MASS VIEW
HEADER TO MODULE INTERFACE REQUIREMENTS
PCB CLEAROUT REGION
HEADER PIN OUT
TYPE 102
TYPE 103
TYPE 104
TYPE 101
DETAIL C
DETAIL D
DETAIL E
DETAIL F
DETAIL G
SECTION A-A
SECTION B-B
VIEW J
SYMBOL DEFINITION
X DIMENSION WITHOUT AN INSPECTION REPORT SYMBOL DOES NOT REQUIRE INSPECTION. IT MAY BE CONTROLLED ON THE INDIVIDUAL COMPONENT DRAWING.
TOTAL NO. OF REPORTING DIMENSIONS REQUIRED
ISH
MISSING SYMBOLS
MAJ 0 | 1-14 25-29
MIN 30-32 34-37
SAMPLE NO.
X5
PCB CLEAROUT REGION
HEADER PIN OUT
CIRCUIT 1
CIRCUIT 2
CIRCUIT 3
CIRCUIT 4
CIRCUIT 5
CIRCUIT 6
HEADER CONTACT PADS 4 PLCS
TWO LINES OF
HEADER MATING EDGE
HEADER ASSEMBLY THIS SIDE
SHIELD HOLES
SIGNAL HOLES
FASTENING HOLE
POST HOLES
PCB CONTACT PADS 4 PLCS
MATING CAVITY | HEADER CAVITY | MODULE CAVITY | CIRCUIT
1 | 1 | 1 | NAEC (GREEN)
2 | 2 | 2 | NAEC (WHITE)
3 | 3 | 3 | NAEC (GREEN)
4 | 4 | 4 | NAEC (WHITE)
5 | 5 | 5 | NAEC (GREEN)
6 | 6 | 6 | NAEC (WHITE)
FIX AND PLACE AREA - THIS SURFACE MUST BE FREE OF DEFECTS, PARTING LINES, MOLD MISMATCH AND EJECT LINES. SEE NOTE #12
SHIELD - SEE CHART (4 - RED 5)
TERMINAL - SEE CHART (1 - RED 3)
HEADER - SEE CHART
TWO PLANES OF
3 SURFACES
4 SURFACES
SEE DETAIL G
SEE DETAIL C
SEE DETAIL D
SEE DETAIL E
SEE DETAIL F
AT PIN TIP
AT PIN BOTTOM
SEE NOTES #8 & #9
SEE NOTES #8 & #9
SEE NOTES #8 & #9
SEE NOTES #8 & #9
SEE NOTES #8 & #9
PIN TIP TO
SHIELD TIP TO
SHIELD HOLES
SIGNAL HOLES
POST HOLES
FASTENING HOLE
TERMINAL TIP
SHIELD TIP
TERMINAL WILL BE BENT 25/180ths OF THE TERMINAL IS BENT
DETAIL G
SCALE 10/1
SECTION B-B
SECTION A-A
NOTES:
1. UNLESS OTHERWISE SPECIFIED AND/OR INDICATED:
DIMENSIONS ARE TO FACE OF VIEW SHOWN AND NOMINALLY MEANINGFUL BY COMPUTER FOR INSPECTION (USE WITH MODEL FOR PRECISE DIMENSIONS). FOR ALL DIMENSIONS, DRAFT ANGLES, FILLETS, CHAMFERS, ETC. USE BUILD, USE WITH MODEL FOR PRECISE TOOL PATH DATA.
2. PCB TO BE FR4 0.062" (1.57mm) THICK.
3. MATING CONNECTOR MINIMUM CLEARANCE AREA TO REMAIN CLEAR OF MODULE COMPONENTS, HOMESTEAD, SUPPLIES, ETC.
4. APPLICABLE ADHESIVE TO BE USED: LOCTITE 592 OR DOW CORNING 7091
5. PCB MOUNTING HOLES DESIGNED TO BE PLATED THROUGH WITH THREADED FASTENER. USE #2-56 PHILLIPS PAN HEAD SELF TAPPING SCREW. RECOMMENDED ASSEMBLY TORQUE IS 4+/-0.1 Nm.
6. MODULE MOUNTING SURFACES, SEALANT TO BE APPLIED TO THIS REGION ONLY. PARTING LINES PRESENT ON THIS SURFACE.
7. PARTS HAVE TO BE SHIPPED IN TRAYS. STACK OF TRAYS ARE TO BE PLACED IN A CLEAN BAG PRIOR TO PLACING THEM INTO A CLEAN BOX.
8. ALL MATING TERMINALS AND PRINTED CIRCUIT BOARD TERMINALS ARE REQUIRED FOR TOLERANCE OF POSITION BY APPROVED GAGES FOR FUNCTIONAL FIT PER CONTROL PLAN.
9. THIS REQUIREMENT MUST BE MET AS CLOSE TO THE PIN TWEEN AS POSSIBLE. MUST NOT BE MEASURED WITHIN THE TAPERED AREA OF THE PIN.
10. FOR CASTING CONFIGURATION REQUIREMENTS, SEE PART NUMBER 35.169400.
11. LOW INSERTION FORCE IS DEFINED AS PIN-AND-PLACE PROCESS FRIENDLY, IF PINSEES ARE WITHIN SPECIFICATION, INSERTION FORCE ALSOW.
12. DO NOT DAMAGE FIXED WHEN PINS ARE SHEED.
13. HEADER CENTER OF MASS IS NOT LOCATED OVER THE PCB. RECOMMENDED TO USE "POSITIVE INSERTION FORCE OPTION" TO PROVIDE THE NECESSARY HEADER TO PCB INTERFERENCE TO ENSURE HEADER REMAINS ON THE PCB DURING THE SOLDERING PROCESS. THE "POSITIVE INSERTION FORCE OPTION" IS NOT INTENDED TO DROP INTO THE PCB WITH NO APPLIED FORCE. CUSTOMER IS RESPONSIBLE OF ENSURING THE HEADER REMAINS IN PLACE THROUGHOUT THE SOLDERING PROCESS. ALTERNATE OPTION IS TO USE THE "ZERO INSERTION FORCE OPTION" OPTION IS TO USE THE THREAD FASTENING SCREW AS DESCRIBED ON NOTE #6.
14. PER PRODUCT SPEC, DO NOT USE COMPONENT IF DROPPED
15. QUALIFIED PER DBM-0191, MARCH 2019 FOR 21 1 40 C 70 125 C 2.5 G HIGH PRESSURE SPRAY PROTECTED / 8 MILLIS 96 VIBRATION 10-2000 HZ 0.04 G2/HZ / JUNE 2013 FOR 61 VIN RUST OF CHASSIS, 1000 HRS MILLIS 61.FANBE 1.2.
16. FOR SETTING TARGET, LIFE 2 DURABILITY ON 61, FEMALE TERMINALS HAVE TO BE LUBRICATED.
PRODUCT SPEC
PART DRAWING
PART NO.
DATE
DRAWN
CHECKED
ENGINEERING
MATERIAL
FINISH
DO NOT SCALE DRAWING
COMPONENT OF SYSTEM REPRESENTED
SEE PART DRAWING
TAA7 ASM CONN 3 & 2-50
HEADER SIZE HEADER
SHEET 1 OF 1
SIZE A
CAGE CODE 06090
35169900
REV 9
REV 9
REV 9