| **File Rev. A** |
| --- |
| **Kern Code** | **Description** | **Build-Up** | **Color** | **Conductive** |
| **A** | **Cad Plate (Cadmium),** *per QQ-P-416, Type II Class 3* | .0002 – .0003 | Bright Dip | Yes |
| **AA** | **Dull Black Hard Anodize**, *per Mil-A-8625 Typ. III Class 2* | .0015 - .002 | Black |  |
| **AB** | **Dull Black Hard Anodize**, *per Mil-A-8625 Typ. III Class 2* | .0001 - .0004 | Black |  |
| **A1** | **Aluminum (High purity),** *per Mil-DTL-83488, Class1 Type II**Supplementary chromate treatment shall meet the corrosion resistance requirements of Mil-DTL-5541 Class 1A and the low electrical resistance requirements of Class 3. Electrical resistance shall be less than 2.5 milliohms when tested per EIA-364-83, with contact points being any 2 opposite points on the same shell.* | .0010 - .0012 |  | Yes |
| **B** | **Cad Plate (Cadmium),** *per QQ-P-416, Type II Class 3* | .0002 – .0003 | Olive Drab | Yes |
| **BC** | **Cad Plate (Cadmium),** *per QQ-P-416, Type II Class 3* | .0002 – .0003 | Black | Yes |
| **BD** | **Gold Iridite**, *per Mil-C-5541, Class 3 over Cadmium per QQ-P-416, Class 3* |  | Gold |  |
| **C** | **Chem Film (Iridite / Alodine),** per Mil-C-5541, Class 3 |  |  | Yes |
| **D** | **Cad Plate (Cadmium),** *per QQ-P-416, Type I Class 3 over Electrodeposited Nickel per QQ-N-290, Class 1 Gr. E* | .0007 - .001 | Bright Dip | Yes |
| **E** | **Cad Plate (Cadmium),** *per QQ-P-416, Type II Class 3 over Electrodeposited Nickel per QQ-N-290, Class 1 Gr. E* | .0007 - .001 | Olive Drab | Yes |
| **F** | **Cad Plate (Cadmium),** *per QQ-P-416, Type I Class 3 over Electroless Nickel per Mil-C26074, Class 3 / 4 Gr. B* | .0007 - .001 | Bright Dip | Yes |
| **G** | **Cad Plate (Cadmium),** *per QQ-P-416, Type II Class 3 over Electroless Nickel per Mil-C-26074, Class 3 / 4 Gr. B* | .0007 - .001 | Olive Drab | Yes |
| **GA** | **Gold**, *per Mil-G-45204 over Copper* *(23.5 – 31.5 Micro Inches or 6.8 Microns)* | 6.8 Microns | Gold |  |
| **GB** | **Gold**, *per Mil-G-45204 over Copper* *(51 – 67 Micro Inches or 1.3 – 1.7 Microns)* | 1.3 – 1.7 Microns | Gold |  |
| **H** | **Electrodeposited Nickel Plate**, *per QQ-N-290, Class 1 Gr. C* | .0007 - .001 |  | Yes |
| **H1** | **Duplex Electrodeposited Nickel:** *Sulfimate Nickel,**per QQ-N-290 Class 1, Category M, .005% Sulfur max., .0006 thick, followed by:**Nickle per QQ-N-290 Class 2 .04% Sulfur min., .0004 thick* | .0010 - .0012 |  | Yes |
| **H2** | **Teflon Nickel – .0002 - .0004 thick over:** *Sulfimate Nickel per QQ-N-290 Class 1, Category M, .005% Sulfur max., .0005 thick, followed by:**Nickle per QQ-N-290 Class 2 .04% Sulfur min., .0003 thick* | .0010 - .0012 |  | Yes |
| **I** | **Cad Plate (Cadmium)**, *per Harris Specification* | .0013 - .0016 |  | Yes |
| **J** | **Electroless Nickel Plate**, *per SAE AMS-C-26074, Class 3 / 4* ***(Bake for 1 hr.),*** *Gr. B* | .0007 - .001 |  | Yes |
| **J1** | **Duplex Electroless Nickel:** *Electroless Nickel per ASTM - B733 Class 1 High Phosphorus internal layer Type V (10 -13% P) .0006 thick followed by:**Medium Phosphorus external layer Type IV (5 - 8% P) .0004 thick.* | .0010 - .0012 |  | Yes |
| **J2** | **Teflon Nickel .0002 - .0004 thick over:** *Electroless Nickel per ASTM - B733 Class 1 High Phosphorus internal layer Type V (10 -13% P) .0006 thick followed by; Medium Phosphorus external layer Type IV (5 - 8% P) .0004*  | .0010 - .0012 |  | Yes |
| **J3** | **Zinc Nickel,** *in accordance with ASTM - B841 Type D (Dull Black) Grade 10 Shall be Hexavalent Chromate coating over Electroless Nickel per* *ASTM - B733 Type IV, SC2, Class 5. Post Bake 2 hours @ 350° F.* | .0010 - .0012 |  | Yes |
| **J4** | **Black Electrodeposited Nickel,** *per MIL-P-18317, RoHS* | .0007 - .0010 | Black | Yes |
| **J5** | **J3 Zinc Nickel** *selectively plated over Electroless Nickel per ASTM-B733. Masked per blueprint* | .0010 - .0012 | Black / Nickel | Yes |
| **J6** | **Electroless Nickel:** *per ASTM-B733 Sc3, Type I Class 4* | .0016 - .0018 |  | Yes |
| **JJ** | **Electroless Nickel Plate**, *per SAE AMS-2404, Class 4* | .001 - .0013 |  | Yes |
| **K** | **Hard Chrome Plate (Satin Finish),** *per QQ-C-320 Type II Class 2* | .0007 - .001 |  | Yes |
| **L** | **Tin Plate,** *per Mil-T-10727 Type I* | .0001 - .00025 | Tin | Yes |
| **M** | **Cad Plate (Gold Iridite),** *per QQ-P-416 Type II Class 3 over Mil-C-26074B Nickle Strike or QQ-N-290 Nickle Flash* | .0006 |  | Yes |
| **N** | **Gold Plate,** *per Mil-G-45204 Type II Class II* | .0001 - .00015 | Gold | Yes |
| **P** | **Passivate,** *per ASTM-A967, QQ-P-35 (for CRES parts only)* |  |  | Yes |
| **P1** | **Passivate – 303 Stainless Steel** *per AMS-QQ-P-35 Type II* |  |  | Yes |
| **P2** | **Passivate – 304, 316, and 321 Stainless Steel** *per AMS-QQ-P-35 Type VI or Type VII* |  |  | Yes |
| **Y** | **Black Oxide,** *per Mil-C-13924****Class 1:*** *Iron Steel****Class 2:*** *Stainless Steel (other than 300 Series)****Class 3:*** *Fused Salt Process****Class 4:*** *300 Series Stainless****Copper Alloys:*** *per Mil-F-495* |  | Black | Yes |
| **R** | **Black Anodize,** *per Mil-A-8625 Type II Class 2 (Aluminum Only)* | .0001 - .0004 | Black | No |
| **S** | **Red Anodize,** *per Mil-A-8625 Type II Class 2 (Aluminum Only)* | .0001 - .0004 | Red | No |
| **SJ** | **Electroless Nickel Plate**, *per Mil-C-26074, Class 3 / 4 (No Grade)* | .0003 - .0006 |  | Yes |
| **T** | **Green Anodize,** *per Mil-A-8625 Type II Class 2 (Aluminum Only)* | .0001 - .0004 | Green | No |
| **TJ** | **Electroless Nickel Plate**, *per SAE AMS-C-26074, Class 3 / 4* ***(Bake for 1 hr.),*** *Gr. A* | .001 - .0013 |  | Yes |
| **U** | **Clear Anodic Coating,** *per Mil-A-8625 Type II Class 1 (Aluminum Only)* | .0001 - .0004 |  | No |
| **V** | **Hard Anodize,** *per Mil-A-8625 Type III Class 1 (Aluminum Only)* | .0018 - .0022 |  | Yes |
| **VA** | **Silver,** *per ASTM-B-700 or QQ-S-365**201 – 335 Micro Inches (5.1 – 8.5 Microns)* | 5.1 – 8.5Microns | Silver | Yes |
| **VB** | **SILVER PLATE,** PER ASTM B 700 TYPE 2, GRADE A, CLASS N, .000204 / .000331 IN. THICK (5.1 µM / 8.4 µM)OVER ELECTROLESS NICKEL PER ASTM B733 TYPE 2 (THICKNESS SHALL BE .0001-INCH MAX) (2.54 µM MAX) PHOSPHORUS 1-3%TOTAL THICKNESS .000219 / .000431 IN (5.6 µM / 10.9 µM) | .000219 / .000431 in (5.6 µm / 10.9 µm) | Silver | Yes |
| **VC** | **SILVER PLATE,** PER ASTM B 700 TYPE 2, GRADE A, CLASS N, .000204 / .000331 IN. THICK (5.1 µM / 8.4 µM) OVERELECTROLESS NICKEL PER ASTM B733 TYPE 2 (THICKNESS SHALL BE .0001-INCH MAX) (2.54 µM MAX) PHOSPHORUS 1-3%OVER .000015 INCH THK. MIN. COPPER PER MIL-C-14550 (.38 µM)TOTAL THICKNESS .000269 / .000446 IN (6.8 µM / 11.3 µM) | .000269 / .000446 in (6.8 µm / 11.3 µm) | Silver | Yes |
| **W** | **Cad Plate (Cadmium),** *per QQ-P-416, Type II Class 2 over Electroless Nickel per Mil-C-26074, Class 4 Gr. B. Phosphorus content 9 to 12%. Bake for 1 to 1.5 hours @ 250° ± 10° F* ***(to meet 500 hr. Salt Spray Test)*** | .001 - .0013 | Olive Drab | Yes |
| **WW** | **Cad Plate (Cadmium),** *per QQ-P-416, Type II Class 2 over Electroless Nickel per Mil-C-26074, Class 3 / 4 Gr. B* ***(to meet 1000 hr. Salt Spray Test)*** | TBA | Olive Drab | Yes |
| **XX** | **Un-Plated, (*No Allowance for finish)*** |  |  |  |
| **Y** | **Black Oxide,** *per Mil-C-13924****Class 1:*** *Iron Steel****Class 2:*** *Stainless Steel (other than 300 Series)****Class 3:*** *Fused Salt Process****Class 4:*** *300 Series Stainless****Copper Alloys:*** *per Mil-F-495* |  | Black | Yes |
| **Z** | **Special Finish per Customer Specification / Blueprint** |  |  |  |
| **ZC** | **Black Zinc Cobalt,** *per ASTM-B840* |  | Black |  |
| **ZCG** | **Green Zinc Cobalt,** *per ASTM-B840* |  | Green |  |