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REV.
A

AS81824™/11

FEDERAL SUPPLY CLASS
5940

RATIONALE

REVISED CRIMP DIAMETERS TO BE CONSISTENT WITH OTHER DETAIL SPECIFICATIONS THAT USE THE IDENTICAL CRIMP BARRELS.

NOTICE

THE COMPLETE REQUIREMENTS FOR PROCURING THE PRODUCT DESCRIBED HEREIN SHALL CONSIST OF THIS DOCUMENT AND THE LATEST ISSUE OF AS81824.

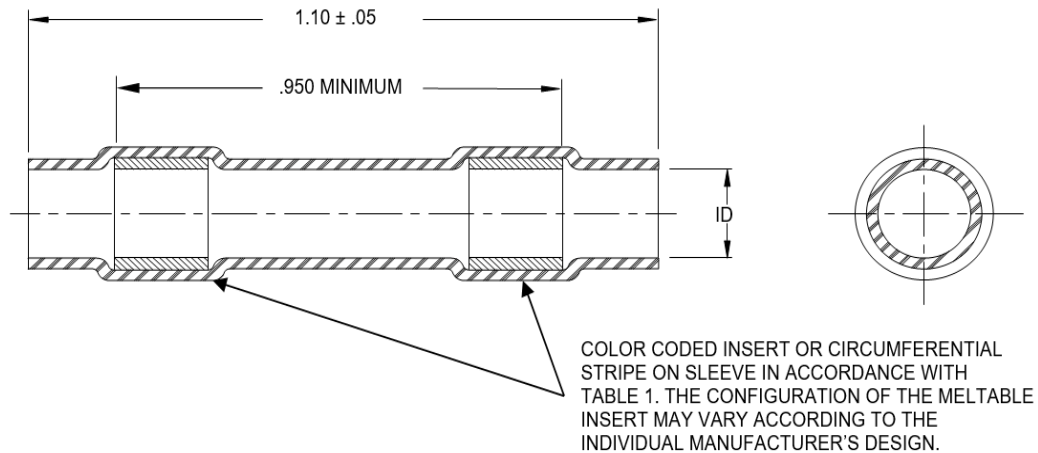


FIGURE 1 - SEALING SLEEVE

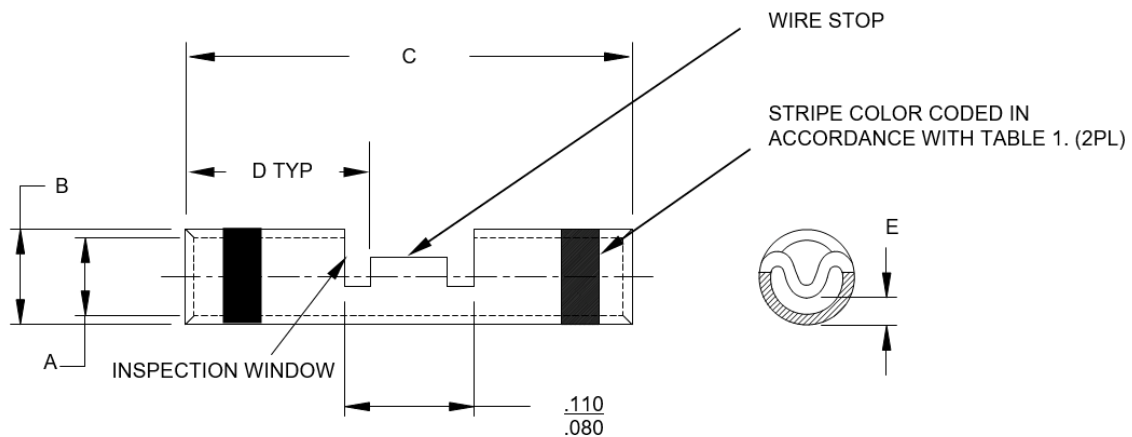
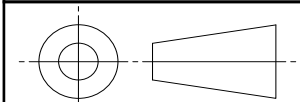


FIGURE 2 - METAL CRIMP SPLICE

For more information on this standard, visit
https://www.sae.org/standards/content/AS81824_11A/

THIRD ANGLE PROJECTION



CUSTODIAN: AE-8C2

PROCUREMENT SPECIFICATION: AS81824



AEROSPACE STANDARD

SPLICE, ELECTRIC, PERMANENT, CRIMP STYLE, NI/CU,
INSULATED, ENVIRONMENT RESISTANT, CLASS 1,
200 °C MAX, 1X1 SEALANT OPENING

AS81824™/11
SHEET 1 OF 4

REV.
A

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TABLE 1 - CONSTRUCTION DETAILS

PART NUMBER	WIRE RANGE	ID* a – MIN b – MAX	A	B	C	D	E MAX	COLOR CODE	WEIGHT LB (KG) PER 1000 PCS MAX
M81824/11-1	SEE TABLE 4	.085 (2.16) .025 (0.64)	.053 (1.35) .045 (1.14)	.080 (2.03) .075 (1.91)	.510 (12.95) .490 (12.45)	.245 (6.22) .225 (5.72)	.0150 (0.38)	RED	1.02 (0.46)
M81824/11-2	SEE TABLE 4	.110 (2.79) .025 (0.64)	.070 (1.78) .063 (1.60)	.107 (2.72) .100 (2.54)	.585 (14.86) .565 (14.35)	.280 (7.11) .260 (6.60)	.020 (0.51)	BLUE	1.61 (0.73)
M81824/11-3	SEE TABLE 4	.170 (4.32) .025 (0.64)	.103 (2.62) .095 (2.41)	.155 (3.94) .146 (3.71)	.585 (14.86) .565 (14.35)	.280 (7.11) .260 (6.60)	0.050 (1.27)	YELLOW	2.72 (1.24)

* INNER DIAMETER (ID)

a - AS RECEIVED

b - AFTER UNRESTRICTED RECOVERY THROUGH THE MELTABLE MATERIAL

REQUIREMENTS: ALL REQUIREMENTS SHALL CONSIST OF THIS DOCUMENT AND THE LATEST ISSUE OF AS81824.

1. MATERIALS:

METAL CRIMP SPLICE: BASIS MATERIAL OF CRIMP SPLICE SHALL BE IN COMPLIANCE WITH ASTM B280, ASTM B75, OR ASTM B187.

INSULATION SLEEVE: SLEEVE SHALL BE HEAT SHRINKABLE CROSS-LINKED FLUOROPOLYMER IN ACCORDANCE WITH AS23053/18 EXCEPT THE DIMENSIONS SHALL BE AS SPECIFIED HEREIN.

SEALING MATERIAL: SEALANTS SHALL BE MELTABLE MODIFIED THERMOPLASTIC.

METAL CRIMP FINISH: SPLICE SHALL BE ELECTRODEPOSITED NICKEL PLATED PER AMS-QQ-N-290.

2. DIMENSIONS:

DIMENSIONS ARE IN INCHES. METRIC EQUIVALENTS (TO THE NEAREST 0.01 MM) ARE FOR GENERAL INFORMATION ONLY AND ARE BASED ON 1 INCH = 25.4 MM. UNLESS OTHERWISE SPECIFIED, TOLERANCES: .005 (0.13 MM) FOR THREE PLACE DECIMALS AND .01 (0.25 MM) FOR TWO PLACE DECIMALS.

THE AVERAGE OF DIMENSION "A" AND "B" SHALL BE WITHIN SPECIFICATION LIMITS.

"B" DIAMETER SHALL NOT INCLUDE COLOR STRIPE.

3. SEALING SLEEVE:

THE SEALING SLEEVE COMPONENT OF THE SPLICE ASSEMBLY SHALL MEET THE REQUIREMENTS OF 3.5.1 OF AS81824 WHEN CONDITIONED AT 200 °C ± 3 °C FOR 16 HOURS ± 0.5 HOUR.

4. TEMPERATURE CYCLING:

THE SPLICES SHALL MEET THE REQUIREMENTS OF 4.8.6.3 OF AS81824 EXCEPT THAT THE TEMPERATURE FOR STEP 3 SHALL BE 200 +3/-0 °C.

5. CONTOUR:

THE CONTOUR OF THE SPLICE MAY VARY FROM THAT SHOWN PROVIDED THAT THE SPLICE REMAINS WITHIN THE MAXIMUM ENVELOPE DIMENSIONS.

6. NO ETCHING OR SOLVENT TREATING OF THE ASSOCIATED WIRE INSULATION SHALL BE PERMITTED.

7. HEAT AGING:

SPLICES SHALL MEET THE REQUIREMENTS OF 4.8.6.7 OF AS81824 EXCEPT THAT THE SAMPLES SHALL BE CONDITIONED AT 200 °C ± 3 °C.

	AEROSPACE STANDARD	AS81824™/11 SHEET 1 OF 1 	REV. A
	SPLICE, ELECTRIC, PERMANENT, CRIMP STYLE, NI/CU, INSULATED, ENVIRONMENT RESISTANT, CLASS 1, 200 °C MAX, 1X1 SEALANT OPENING		



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