

REV.
A

AS81824/1

RATIONALE

TOTAL REVISION INCLUDES NEW DRAWINGS, TOOLS, REFERENCES, AND MINOR TECHNICAL CHANGES.

NOTICE

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

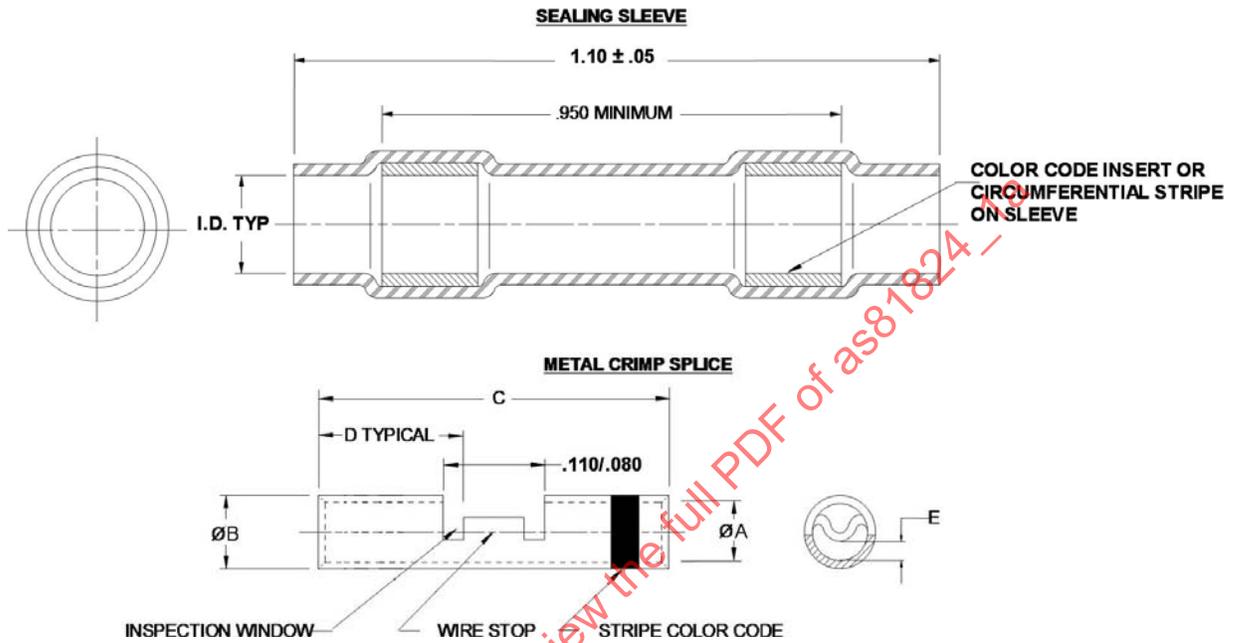


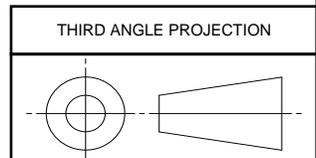
FIGURE 1 - SPLICE SEALING SLEEVE AND METAL CRIMP SPLICE

TABLE 1 - CONSTRUCTION DETAILS

PART NUMBER	WIRE RANGE	I.D. 1/ A (MIN) B (MAX)	ØA	ØB	C	D	E MAX	COLOR CODE	WEIGHT LB (KG) PER 1000 PCS - MAX REF
M81824/1-1	SEE TABLE 4	.085 (2.18) .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)	.015 (0.38)	RED	1.10 (0.5)
M81824/1-2	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	1.75 (0.8)
M81824/1-3	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)	.050 (1.27)	YELLOW	3.15 (1.4)

1/ I.D. A IS AS RECEIVED AND B IS AFTER UNRESTRICTED RECOVERY THROUGH MELTABLE MATERIAL.

SAE values your input. To provide feedback on this Technical Report, please visit <http://www.sae.org/technical/standards/AS81824/1A>



CUSTODIAN: AE-8/AE-8C2

PROCUREMENT SPECIFICATION: AS81824



AEROSPACE STANDARD

(R) SPLICE, IN-LINE, ELECTRIC, CRIMP, SN/CU, ENVIRONMENTAL, HEAT-SHRINKABLE SLEEVE (150 °C), 1 X 1 SEALANT OPENING

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SHEET 1 OF 3

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

CONFIGURATION:

1. DIMENSIONS ARE IN INCHES. METRIC EQUIVALENTS (TO THE NEAREST .01 MM) ARE GIVEN FOR GENERAL INFORMATION ONLY AND ARE BASED UPON 1 INCH = 25.4 MM.
2. UNLESS OTHERWISE SPECIFIED, TOLERANCES ARE ± 0.005 (0.13 MM) FOR THREE PLACE DECIMALS AND ± 0.01 (0.25 MM) FOR TWO PLACE DECIMALS.
3. WIRE STOP IS REQUIRED TO LOCATE THE CRIMP ZONE ON THE CONDUCTOR. CONTOUR MAY VARY FROM THAT SHOWN IN FIGURE 1.
4. THE "B" DIAMETER SHALL NOT INCLUDE COLOR STRIPE.

MATERIALS:

1. METAL CRIMP SPLICE SHALL BE COPPER PER ASTM B280, ASTM B75/B75M, ASTM B187/B187M, ASTM B1, ASTM B301/B301M, OR ASTM B152.
2. INSULATION SLEEVE SHALL BE HEAT SHRINKABLE, TRANSPARENT POLYVINYLIDENE FLUORIDE PER THE PERFORMANCE REQUIREMENTS OF AS23053/8.
3. SEALING MATERIAL SHALL BE MODIFIED THERMOPLASTIC IN ACCORDANCE AS81824.
4. FINISH SHALL BE TIN PLATED IN ACCORDANCE WITH AS81824.

CRIMP TOOLS:

1. CRIMP TOOLS SHALL BE AS SPECIFIED IN TABLE 2 (SEE QUALIFICATION REQUIREMENTS AND APPLICATION NOTES).

TABLE 2 - CRIMP TOOLS

SPLICE PART NO.	BASIC CRIMP TOOL NO.	DIE NO.
M81824/1-1 M81824/1-2	M22520/5-01 M22520/10-01 M22520/37-01	M22520/5-103 M22520/10-104 N/A
M81824/1-3	M22520/5-01 M22520/10-01 M22520/37-01	M22520/5-102 M22520/10-103 N/A

PART IDENTIFICATION NUMBER (PIN):

1. THE SPLICE IS IDENTIFIED AS SHOWN BELOW. THE SPLICE SUPPLIER SHALL BE IDENTIFIED BY A MANUFACTURER SYMBOL ON THE CRIMP BARREL IN ACCORDANCE WITH AIR1353 (LOCATION OPTIONAL).

_____ DASH NUMBER FOR WIRE SIZES 26 - 20 (SEE TABLE 3)
 _____ DETAIL SPECIFICATION NUMBER FOR TIN PLATED SPLICE
 _____ BASIC SPECIFICATION NUMBER

PERFORMANCE:

1. THE SPLICE SHALL PROVIDE AN AS81824 ENVIRONMENTALLY PROTECTED PERMANENT JOINTS CONNECTING A MAXIMUM OF TWO TO TWO WIRES (NO MORE THAN TWO WIRES INSERTED IN EACH END OF THE SPLICE). WHEN USING TWO WIRES REFER TO TABLES 4 AND 5 FOR CMA RANGES.

QUALIFICATION:

1. FOR QUALIFICATION TESTING, ONLY SPLICE ASSEMBLIES MADE WITH INSULATED TIN PLATED COPPER CONDUCTOR WIRE IN ACCORDANCE WITH AS22759/180 (SEE TABLE 3) SHALL BE USED.

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	(R) SPLICE, IN-LINE, ELECTRIC, CRIMP, SN/CU, ENVIRONMENTAL, HEAT-SHRINKABLE SLEEVE (150 °C), 1 X 1 SEALANT OPENING		