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REV.
A

AS81824™/13

FEDERAL SUPPLY CLASS
5940

RATIONALE

TEST SPECIMEN MAX COMBINATION ADJUSTED FOR IMPROVED FIT OF CONDUCTORS AND BALANCE THE CONDUCTOR SIZES OF INPUT AND OUTPUT CLOSEST TO THE MAXIMUM NUMBER ALLOWED. CLARIFICATION TO VOLTAGE DROP TEST ADDED. EDITORIAL CORRECTIONS AND PARAGRAPH ALIGNMENT HAVE BEEN INCORPORATED BUT NOT INDICATED TO HIGHLIGHT KEY CHANGES WITH CHANGE BARS.

NOTICE

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

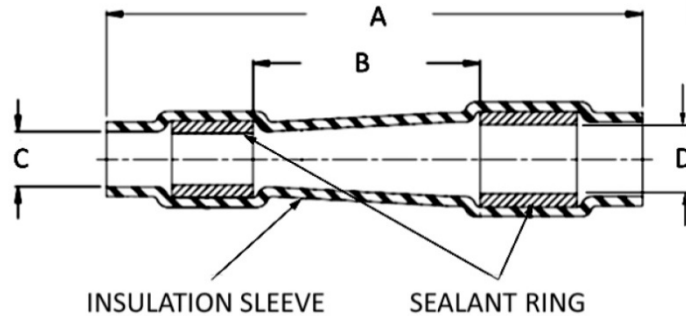


FIGURE 1 - SEALING SLEEVE 1 X 1 ADHESIVE OPENING

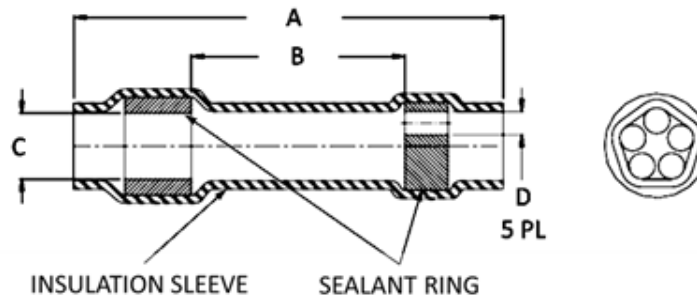


FIGURE 2 - METAL CRIMP SPLICE 1 X 5 adhesive opening

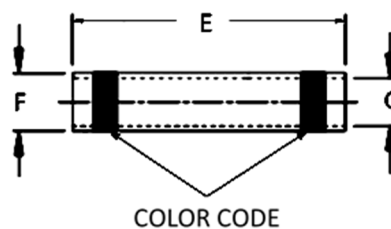
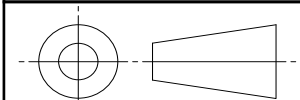


FIGURE 3 - METAL CRIMP

For more information on this standard, visit

<https://www.sae.org/standards/content/AS81824/13A/>

THIRD ANGLE PROJECTION



CUSTODIAN: AE-8/AE-8C2

PROCUREMENT SPECIFICATION: AS81824



AEROSPACE STANDARD

SPLICE, STUB, ELECTRIC, PERMANENT, CRIMP
STYLE, NICKEL/COPPER, INSULATED, ENVIRONMENT
RESISTANT, 175 °C MAX

AS81824™/13
SHEET 1 OF 4

REV.
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Documents

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TABLE 1 - CONSTRUCTION DETAILS

PART NUMBER	MAX NO. OF WIRE	A ±.05 ±(1.3)	B MIN	C MIN	D MIN 1/	E ±.005 ±(0.13)	F (OD) ±.002 ±(0.07) 3/	G (ID) ±.002 ±(0.07)	COLOR CODE	FIG 2/	WEIGHT LB (Kg) PER 1000 PCS MAX
M81824/13-1	2	.73 (18.5)	.325 (8.3)	.04 (1.0)	.08 (2.0)	.275 (6.99)	.077 (1.96)	.048 (1.22)	RED	1	.50 (0.2)
M81824/13-2	2	1.15 (29.2)	.275 (7.0)	.09 (2.3)	.18 (4.6)	.275 (6.99)	.103 (2.62)	.067 (1.70)	BLUE	1	1.40 (0.6)
M81824/13-3	2	1.15 (29.2)	.275 (7.0)	.09 (2.3)	.18 (4.6)	.275 (6.99)	.150 (3.81)	.100 (2.54)	YELLOW	1	1.80 (0.8)
M81824/13-4	8 4/	.93 (23.5)	.375 (9.5)	.25 (6.4)	.08 (2.0)	.275 (6.99)	.103 (2.62)	.067 (1.70)	BLUE	2	1.65 (0.7)
M81824/13-5	10 4/	.93 (23.6)	.375 (9.5)	.25 (6.4)	.08 (2.0)	.275 (6.99)	.150 (3.81)	.100 (2.54)	YELLOW	2	2.15 (1.0)

1/ FOR -1, A .08 INCH (2.0 MM) DIAMETER GAGE PIN SHALL CLEAR MINIMUM OF .25 INCH (6.4 MM) FROM THE INSIDE EDGE OF THE SEALANT RING.

2/ REFER TO LISTED FIGURE NUMBER (FIG) FOR INSULATION SLEEVE. FIGURE 4 APPLIES TO ALL DASH NUMBERS.

3/ TOLERANCES FOR -3 AND -5 ARE ±.003 (0.08).

4/ MAXIMUM NUMBER OF WIRES IN EACH SEALANT OPENING IS 2. FOR -4, MAXIMUM NUMBER OF WIRE ASSUMES THE MINIMUM SIZE WIRE IS 26 - SEE TABLES 4 AND 5.

REQUIREMENTS:

1. MATERIALS:

INSULATION SLEEVE: HEAT SHRINKABLE CROSS-LINKED FLUOROPOLYMER (PERFORMANCE REQUIREMENTS PER AS23053/8).

SEALING RING: MODIFIED THERMOPLASTIC

METAL CRIMP:

COPPER: ASTM B280, ASTM B75/B75M, ASTM B1, ASTM B187/B187M, OR ASTM B152/B157M

FINISH: NICKEL PER AMS-QQ-N-290

2. DIMENSIONS:

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

3. CONTOUR:

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

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

5. SEALING SLEEVE CLOSURE:

WHEN TERMINATED, MELTABLE SEALANT ON THE NON-WIRED SIDE SHALL CLOSE THE OPENING AND PROVIDE SEALING.

	AEROSPACE STANDARD		AS81824™/13 SHEET 2 OF 4	REV. A
	SPLICE, STUB, ELECTRIC, PERMANENT, CRIMP STYLE, NICKEL/COPPER, INSULATED, ENVIRONMENT RESISTANT. 175 °C MAX			



