

SAE Technical Standards Board Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user."

SAE reviews each technical report at least every five years at which time it may be revised, reaffirmed, stabilized, or cancelled. SAE invites your written comments and suggestions.

REV.
A

AS81824™/5

FEDERAL SUPPLY CLASS
5940

RATIONALE

REWRITTEN TO SAE REQUIREMENT FROM THE ORIGINAL MILITARY SPECIFICATION COPY.

NOTICE

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

THE ASSEMBLIES COVERED BY THIS SPECIFICATION SHEET CONSIST OF ONE SHIELD SPLICE IN ACCORDANCE WITH AS81824/4 AND ONE OR MORE PRIMARY WIRE SPLICES IN ACCORDANCE WITH AS81824/1. THE CONTENTS OF THE ASSEMBLIES SHALL BE IN ACCORDANCE WITH TABLE 1.



SHIELD SPLICE PER AS81824/4



CONDUCTOR SPLICE PER AS81824/1

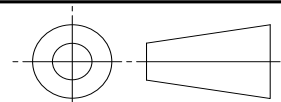
FIGURE 1 - SPLICES

TABLE 1 - ASSEMBLY CONTENTS AND RECOMMENDED USE RANGES

PART NUMBER	AS81824/1 COLOR CODE (REF)	CABLE PARAMETERS		ASSEMBLY COMPONENTS		
		NUMBER OF CONDUCTORS	CONDUCTOR SIZE RANGE	CONDUCTOR SPLICE PART NO.	QTY	SHIELD SPLICE PART NO.
M81824/5-1	RED	1	26-24-22-20	M81824/1-1	1	M81824/4-1
M81824/5-2	BLUE	1	20-18-16	M81824/1-2	1	M81824/4-2
M81824/5-3	YELLOW	1	16-14-12	M81824/1-3	1	M81824/4-3
M81824/5-4	RED	2	26-24-22-20	M81824/1-1	2	M81824/4-5
M81824/5-5	BLUE	2	18-16	M81824/1-2	2	M81824/4-6
M81824/5-6	YELLOW	2	14	M81824/1-3	2	M81824/4-6
M81824/5-7	YELLOW	2	12	M81824/1-3	2	M81824/4-7
M81824/5-8	RED	3 OR 4	26-24	M81824/1-1	4	M81824/4-5
M81824/5-9	RED	3 OR 4	22-20	M81824/1-1	4	M81824/4-6
M81824/5-10	BLUE	3 OR 4	18-16	M81824/1-2	4	M81824/4-6
M81824/5-11	YELLOW	3 OR 4	14-12	M81824/1-3	4	M81824/4-7

For more information on this standard, visit
<https://www.sae.org/standards/content/AS81824/5A/>

THIRD ANGLE PROJECTION



CUSTODIAN: AE-8/AE-8C2

PROCUREMENT SPECIFICATION: AS81824



AEROSPACE STANDARD

(R) SPLICES, ELECTRIC, PERMANENT, CRIMP/SOLDER STYLE, COPPER, INSULATED, ENVIRONMENT RESISTANT, KIT, SHIELDED CABLE, 150 °C

AS81824™/5
SHEET 1 OF 2

REV.
A

Documents

Copyright 2022 SAE International

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of SAE.

TO PLACE A DOCUMENT ORDER: Tel: 877-606-7323 (inside USA and Canada)
Fax: 724-776-0790

Tel: +1 724-776-4970 (outside USA)
Email: CustomerService@sae.org

SAE WEB ADDRESS: <http://www.sae.org>

REQUIREMENTS:

ALL REQUIREMENTS SHALL BE AS SPECIFIED IN RESPECTIVE COMPONENT SPECIFICATIONS EXCEPT AS FOLLOWS:

- 1. VOLTAGE DROP: TEST CURRENT SHALL BE 1 AMPERE. VOLTAGE DROP SHALL NOT EXCEED THAT MEASURED ACROSS AN EQUAL LENGTH OF THE SHIELD OF THE MINIMUM SIZE CABLE.
- 2. INSULATION RESISTANCE: 100 MEGOHMS, MINIMUM.
- 3. TENSILE STRENGTH: 20 POUNDS, MINIMUM. BREAKAGE OF CABLE SHIELD BELOW 20 POUNDS SHALL CONSTITUTE PASSING. TENSILE STRENGTH SHALL BE TESTED ON FULLY ASSEMBLED CABLE.
- 4. CONTINUOUS OPERATING TEMPERATURE SHALL BE -55 TO 150 °C.
- 5. EACH ASSEMBLY SHALL BE INDIVIDUALLY PACKAGED. THE PACKAGE SHALL INCLUDE ONE ASSEMBLY INSTRUCTION.
- 6. ASSEMBLY INSTRUCTIONS SHALL BE FURNISHED BY THE PRODUCER WITH EACH SPLICE ACQUIRED UNDER THIS SPECIFICATION.

NOTES:

- 1. REFER TO AS81824/1 AND AS81824/4 FOR COMPONENT DETAILS AND OTHER INFORMATION SUCH AS CRIMPING TOOL INFORMATION. SEE REQUIREMENT 6.
- 2. THESE SHIELDED CABLE SPLICE ASSEMBLIES ARE INTENDED FOR USE WITH SHIELDED (BRAID STYLE) AND JACKETED CABLE AS SPECIFIED IN TABLE 1. THE ASSEMBLY SHALL PROVIDE AN ENVIRONMENTAL SEAL.
- 3. EACH CRIMP SPLICE IN THE ASSEMBLY IS INTENDED TO SPLICE ONE CONDUCTOR TO ONE CONDUCTOR.

SPECIFICATION NOTES:

- 1. REVISION INDICATOR: A CHANGE BAR (I) LOCATED IN THE LEFT MARGIN IS FOR THE CONVENIENCE OF THE USER IN LOCATING AREAS WHERE TECHNICAL REVISIONS, NOT EDITORIAL CHANGES, HAVE BEEN MADE TO THE PREVIOUS ISSUE OF THIS DOCUMENT. AN (R) SYMBOL TO THE LEFT OF THE DOCUMENT TITLE INDICATES A COMPLETE REVISION OF THE DOCUMENT, INCLUDING TECHNICAL REVISIONS. CHANGE BARS AND (R) ARE NOT USED IN ORIGINAL PUBLICATIONS, NOR IN DOCUMENTS THAT CONTAIN EDITORIAL CHANGES ONLY.

	AEROSPACE STANDARD	AS81824™/5 SHEET 2 OF 2	REV. A
	(R) SPLICES, ELECTRIC, PERMANENT, CRIMP/SOLDER STYLE, COPPER, INSULATED, ENVIRONMENT RESISTANT, KIT, SHIELDED CABLE, 150 °C		



Documents

Document Sharing Hub