



TAPE, ELECTRICAL INSULATING-PRESSURE SENSITIVE

ESB-M3G5-A

1. SCOPE

The materials defined by this specification are black or grey elastoplastic (vinyl or other elastomeric material) backed electrical insulating tape.

Type I Electrical Insulating - Pressure Sensitive
Type II Electrical Insulating - Pressure Sensitive – Low Temperature

2. APPLICATION

This specification was released originally for material used in electrical automotive assemblies. The Type II material can be handled effectively at low temperatures (-18 °C) for general repair requirements.

3. REQUIREMENTS

(ESB-M3G5-A specification shown without type designation is understood to be Type I)

All requirements and test methods shall be as described in MIL-I-7798-A, except for the following:

3.0 STANDARD REQUIREMENTS FOR PRODUCTION MATERIALS

Material suppliers and part producers must conform to the Company's Standard Requirements For Production Materials (WSS-M99P1111-A).

3.2	COLOR	Black or Gray
3.3	THICKNESS (MIL-I-7798-A)	0.007 +/- 0.001 in (0.18 +/- 0.03 mm)
3.4	WIDTH	As specified on Purchase Notice
3.5	LENGTH OF ROLL	As specified on Purchase Notice
3.6	ADHESION AT LOW AND HIGH TEMPERATURES , avg min (Type II only)	
3.6.1	To Steel: -18 +/- 1 °C 38 +/- 1 °C	25 oz/in (273 N/m) 12 oz/in (131 N/m)
3.6.2	To Backing: -18 +/- 1 °C 38 +/- 1 °C	40 oz/in (438 N/m) 11 oz/in (120 N/m)

Test Method: Federal Specification HH-I-595a (January 13, 1966) Sections 4.6.3.2 Adhesion to Steel and Backing, and 4.6.3.2.1 Procedure, except test shall be conducted at -18 °C and 38 °C.

Date	Action	Revisions
2005 05 25	Revised	Inserted 3.0; Deleted 3.1, 3.11, 4
1978 09 01		Metricated, Renumbered & Retyped CAH1-RD572066-88
1963 06 21	Released	AS1 #945





3.7 UNROLLING AT LOW AND HIGH TEMPERATURE, individual reading, max
(Type II only)

3.7.1 At -18 +/- 1 °C 7 lb/in (1200 N/m)

3.7.2 At 38 +/- 1 °C 3.0 lb/in (525 N/m)

Test Method: Federal Specification HH-I-595a (January 13, 1966) Sections 4.6.4 Unrolling and 4.6.4.1 Procedure, except test shall be conducted at -18 °C and 38 °C.

3.8 ELONGATION AT LOW TEMPERATURES, min
(Type II only)

3.8.1 At 4 +/- 1 °C 125%

3.8.2 At -7 +/- 1 °C 100%

Test Method: Federal Specification HH-I-595a, (January 13, 1966) Sections 4.6.5 Elongation, 4.6.5.1 Apparatus, and 4.6.5.2 Procedure, except test shall be conducted at 4 °C and -7 °C.

3.9 COPPER CORROSION
(FLTM BU 106-01)

No evidence of the characteristic green of cupric chloride and/or of the characteristic blue-black color of copper sulfide on the copper plates.

3.10 FLAMMABILITY TEST 0 in/minute DNI
(FLTM BN 024-02) (Does not ignite)