

FUJIPOLY[®]

Silicone Rubber Fusible Tape FUJIPOLY[®] 5TV Type / FUJIPOLY[®] 7KBC Type.

FUJIPOLY[®] is registered Trademarks of Fujipoly Group.

FUJIPOLY DATA SHEET NUMBER FPDS 2K-26 / Version 6

Fuji Polymer Industries Co.,Ltd. (Overseas office)

JAPAN

175 Kajiyashiki, Toyota, Aichi Japan 470-0533

[Phone] +81-565-65-1729 [Facsimile] +81-565-65-1857

[E-mail] fujipoly@mx.fujipoly.co.jp

ISO9001(Aichi Plant)

Fuji Polymer Industries Co.,Ltd. (Taipei liaison office)

TAIWAN

Room B,7F.,No.59,Tiansiang Rd.,Jhongshan District,Taipei City,10452,Taiwan

[Phone] +886-2-2586-5771 [Facsimile] +886-2-2586-5745

[E-mail] fujipolytw@fujipoly.com.tw

Fujipoly America Corporation.

U.S.A.

900 Milik Street P.O. Box 119 Carteret, NJ 07008-0119

[Phone] +1-732-969-0100 [Facsimile] +1-732-969-3311

[E-mail] info@fujipoly.com [web site] www.fujipoly.com

QS9000 / ISO9001

Fujipoly Europe Ltd.

U.K.

Avant Business Centre, Unit 8, Third Avenue, Bletchley Milton Keynes, MK1 1DR U.K.

[Phone] +44-1908-277800 [Facsimile] +44-1908-277900 [E-mail] sales@fujipolyeurope.co.uk

Fujipoly Singapore PTE Ltd.

SINGAPORE

Blk 71 Ayer Rajah Crescent #04-03/06 Singapore 139951

[Phone] +65-6773-3466 [Facsimile] +65-6773-2234 [E-mail] fujipoly@mbox5.singnet.com.sg

ISO9001

Fujipoly (Thailand) Co.,Ltd.

THAILAND

55/8 Moo 13 Navanakorn Industrial Estate Phase 4 Phaholyothin Road.

Klong Nueng,Klong Luang,Pathumthanee 12120, Thailand

[Phone] +66-2-529-2732 [Facsimile] +66-2-529-2223 [E-mail] marketing@fujipoly.co.th

ISO9001 / ISO14001

Fujipoly Hong Kong Ltd.

HONG KONG

Workshop (F&J), Block 1, 4/F,Kwai Tak Industrial Centre Kwai Tak Street, Kwai Chung, N.t.,Hong Kong.

[Phone] +852-2428-3770 [Facsimile] +852-2489-9637 [E-mail] info@fujipoly.com.hk

Fujipoly China Ltd., China Factory

CHINA

1/F., JiaLongDa Bldg., Changlang Road, Jinmei Estate, Changping, Dongguan, GuangDong China 523579

[Phone] +86-769-83989660 [Facsimile] +86-769-83989662 [E-mail] info@fujipoly.com.hk

ISO9001 / ISO14001

FUJIPOLY[®] DATA SHEET FPDS 2K-26

1] Product Name :

- 1) Insulation silicone Rubber Fusible Tape (FUJIPOLY[®] 5TV Type)
- 2) Conductive silicone Rubber Fusible Tape (FUJIPOLY[®] 7KBC Type)

2] Features :

By spiral wrapping each successive layer slightly over the previous one, the tape fuses to itself over the component. Bonding only to itself, the permanent fusion begins within three minutes after contact.

Once the amalgamation is cured, the protected area withstands exposure to moisture, electrical and mechanical shock, temperature extremes, UV and ozone without degradation. Accordingly, its use in a wide range of situations, not normally handled by a tape product, is extremely feasible and offers a considerable cost reduction versus otherwise common or alternate methods.

Available in two formulations : Insulation and Conductive. The insulation type (FUJIPOLY[®] 5TV Type) can be substituted any where other forms of insulating materials are used ; such as, in place of custom die-cut pads, potting compounds and over-moldings.

The conductive type (FUJIPOLY[®] 7KBC Type) derives its properties from loading of the silicone rubber base material with high density carbon. Resiliency and long-term aging properties are excellent ; applicable in a very wide temperature range from -45°C to $+250^{\circ}\text{C}$ (-49°F to $+480^{\circ}\text{F}$). Shielding effectiveness in RFI / EMI applications is adequate in many situations and is especially useful on irregular surfaces where costly custom shielding solutions may otherwise be necessary.

Two profiles are available. rectangular and delta shaped. The rectangular is a typical tape shape (available for insulation type only) used universally for most applications: the delta shape facilitates spiral wrapping around cables and harnesses by way of its natural tendency to conform in a helix.

- 1) Insulation silicone Rubber Fusible Tape (FUJIPOLY[®] 5TV Type)
 - a) FUJIPOLY[®] 5TV Type are class H (180°C / 360°F) electrical insulation tapes.
 - b) Consisting self-amalgamating silicone rubber.
 - c) They are applicable in a very wide range of temperatures.
 - d) Developed by Fujipoly original silicone rubber technology.

- 2) Conductive silicone Rubber Fusible Tape (FUJIPOLY[®] 7KBC Type)
 - a) Fujipoly conductive RFI / EMI / ESD Silicone Rubber Fusible Tapes are electrical conductive tapes consisting self-amalgamating silicone rubber.
 - b) They are applicable in a very wide range of temperatures.
(-45°C ~ $+250^{\circ}\text{C}$ / -49°F ~ $+480^{\circ}\text{F}$)
 - c) Developed by Fujipoly original silicone rubber technology.

3] Typical Properties.

Table - 1

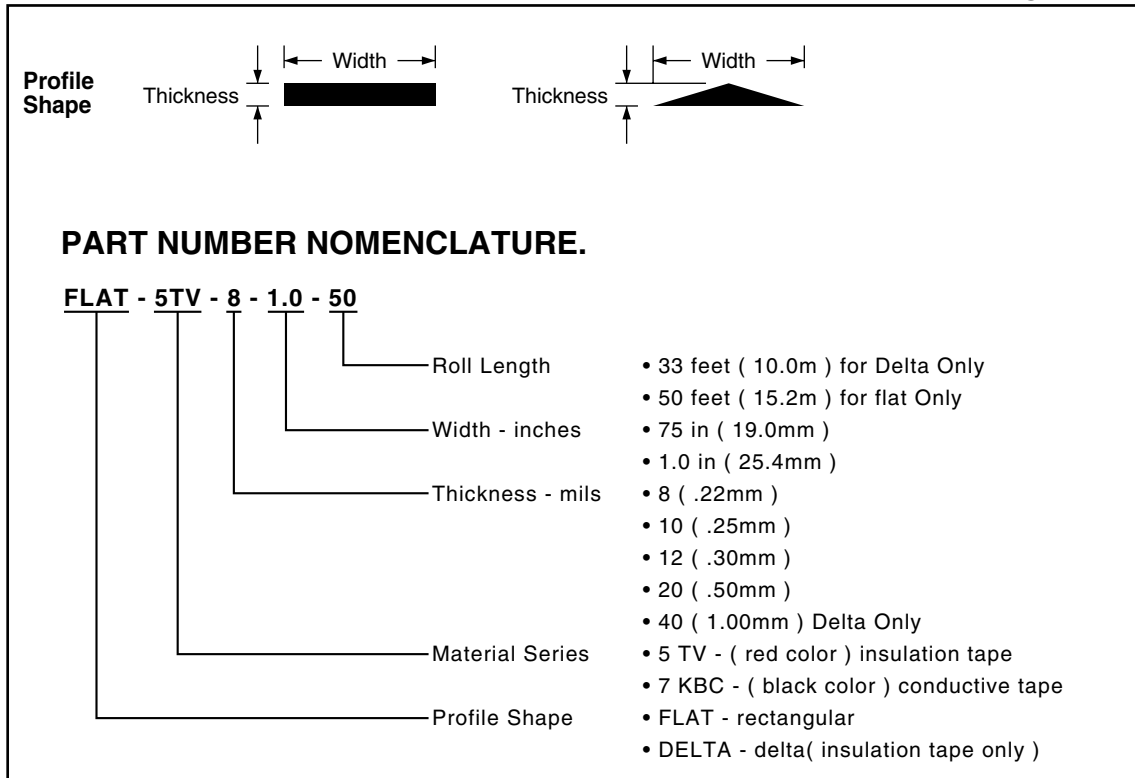
Insulation Tape Part Number	Color	Hardness (Shore A)	Tensile Strength (Kg)	Elongation (%)	Tear Strength (%)	Adhesive Force (gr)	Withstand Voltage (AC KV)	Volume Resistivity (ohms) Nomal	Volume Resistivity (ohms) Moist	Thermal Weight Loss (%)	Content Siloxane (wt.%)
FLAT - 5TV - 8 - .75	red	50±5	> 1.1	> 400	> 100	> 300	> 4.0	1.0x10 ¹⁵	1.0x10 ¹⁰	6.2% @ 225°C (440°F) x24 Hrs	D ₄ ~D ₁₀ ~=0.27 D ₁₁ ~D ₂₀ ~=0.40 total=0.67
FLAT - 5TV - 8 - 1.0	red	50±5	> 1.5	> 400	> 100	> 400	> 4.0	1.0x10 ¹⁵	1.0x10 ¹⁰		
FLAT - 5TV - 10 - .75	red	50±5	> 1.8	> 400	> 100	> 300	> 4.2	1.0x10 ¹⁵	1.0x10 ¹⁰		
FLAT - 5TV - 10 - 1.0	red	50±5	> 2.5	> 400	> 100	> 400	> 4.2	1.0x10 ¹⁵	1.0x10 ¹⁰		
FLAT - 5TV - 12 - .75	red	50±5	> 2.7	> 400	> 100	> 300	> 4.5	1.0x10 ¹⁵	1.0x10 ¹⁰		
FLAT - 5TV - 12 - 1.0	red	50±5	> 3.5	> 400	> 100	> 400	> 4.5	1.0x10 ¹⁵	1.0x10 ¹⁰		
FLAT - 5TV - 20 - .75	red	50±5	> 4.5	> 400	> 100	> 300	> 5.0	1.0x10 ¹⁵	1.0x10 ¹⁰		
FLAT - 5TV - 20 - 1.0	red	50±5	> 6.0	> 400	> 100	> 400	> 5.0	1.0x10 ¹⁵	1.0x10 ¹⁰		
DELTA- 5TV - 40 - 1.0	red	50±5	> 5.6	> 400	> 100	> 400	> 6.0	1.0x10 ¹⁵	1.0x10 ¹⁰		

Table - 2

Conductive Tape Part Number	Color	Hardness (Shore A)	Tensile Strength (Kg)	Elongation (%)	Tear Strength (%)	Adhesive Force (gr)	Shielding Effectiveness 100 MHz	Shielding Effectiveness 1 GHz	Thermal Weight Loss (%)	Content Siloxane (wt.%)
FLAT - 7KBC - 10 -1.0	black	68±5	2.00min	> 150	> 75	2.00min	30dB	30dB	6.2% @ 225°C(440°F) x24 Hrs	D ₄ ~D ₁₀ ~=0.27 D ₁₁ ~D ₂₀ ~=0.40 total=0.67
FLAT - 7KBC - 20 -1.0	black	68±5	2.00min	> 150	> 75	2.00min	30dB	30dB		

All dimensions in inches and millimeters.

Figure 1



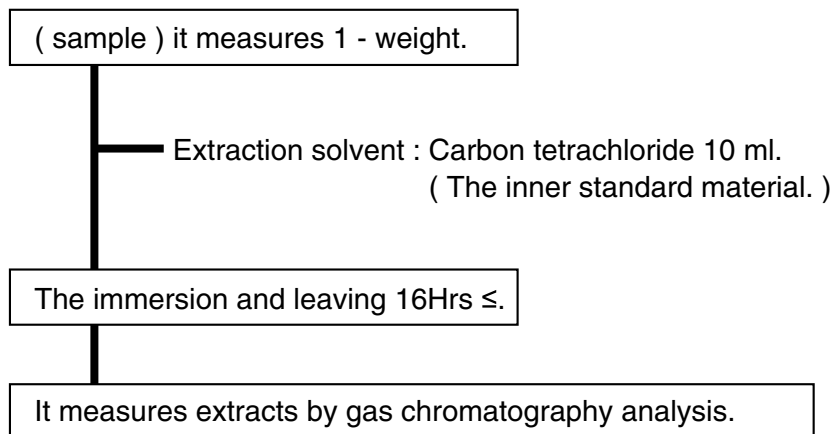
4] **Package** : 4 Rolls / 1 package

5] **Shelf Life** : 6 month after delivery at normal temperature.

6] **Test method for the Low Molecular Siloxane content** :

[Test method]

< The preprocessing >



< The measurement condition>

model : SHIMAZU SEISAKUSHO Co., Ltd. GC -12A

detector : FID (The hydrogen flame ionization detector.)

column : OV -17 (3m)

column temperature : 60°C • 2min – temperature-programmed 16°C/min–Maintenance 300°C

ventage temperature : 280°C

carrier gas flow rate : 40ml / min

inculcating quantity : 2 μl

8] Others Technical Informations.

Fuji Poly website <http://www.fujipoly.com>

Notes :

- All Fujipoly test data in this document is based on Fujipoly test method and is believe to be accurate and reliable. Nevertheless, any Fujipoly test data shows typical product properties, and does not show the guaranteed product properties.
- Some Silicone oil could exude from the product according to operating conditions.
- Some low molecular Siloxane could vaporize from the product according to operating conditions.
- It is advisable to use the product under recommended operating condition. Some more Silicone oil could exude from the product if it was used over the recommended condition.
- It is advisable to use the product under parallel and even compression. Some more Silicone oil could exude from the product if it was used under excessive or partial stress.
- Products testing by the purchaser is recommended in order to meet expected results such as performance and application.

: April.18th 2008	FPDS 2K – 26 version 6	
: January.16th 2006	FPDS 2K – 26 version 5	
: September.1st 2005	FPDS 2K – 26 version 4	
: February.14th 2003	FPDS 2K – 26 version 3	
: January.31th 2002	FPDS 2K – 26 version 2	
: March.3rd 2000	FPDS 2K – 26 version 1	FUJIPOLY 5TV,7KBC Type
: July.20th 1997	FPDS 97 – 12 version 3	FUJIPOLY 7KBC Type
: July.29th 1996	version 2	FUJIPOLY 5TV Type
ISSUED : April.12ed 1996	FPDS 96 – 03 version 1	FUJIPOLY 5TV Type

STATEMENT OF LIEU OF WARRANTY: All technical information and data in this document is based on tests and is believed to be accurate and reliable. Nevertheless, since the products described herein are not provided to conform with mutually accepted specifications and the use thereof is unknown, the manufacturer and seller of the product do not guarantee results, freedom from patent infringement, or suitability of the product for any application thereof. The manufacturer and seller of the product, described in this document will provide all possible technical assistance and will replace any products proven defective. No statement or recommendation made by the manufacturer or seller, not contained herein, shall have any force of effect unless in conformity with an agreement signed by an officer of the seller or manufacturer. Product testing by the purchaser is recommended in order to confirm expected results.

Copyright ' 1996 Fujipoly.

*FUJIPOLY® is registered Trademark of Fujipoly Group.