

# SPDL485025 Series

# Ultra Compact SMD Common Mode Chokes

The SPDL485025 product series is an expansion of Signal's SPDL Series of compact SMD common mode chokes for suppression of common mode noise as required in electronic devices filtering power line signals. It is applicable to high density devices in the consumer, industrial and interface markets.

In many of today's electronic designs, smaller size and weight reduction is always of interest. This is evident in many applications such as computers, peripherals and personal charging devices which employ surface mount technology. Performance is still essential with higher current capability.

In conjunction with the latest winding technology and ferrite cores, Signal's SPDL Series II designs achieve the most effective noise suppression, offering high common mode impedance in the noise band with the highest possible current ratings in most models.



#### **General Features**

- Compact SMD topology
- Ferrite toroid core construction
- Magnetically shielded
- Excellent common mode EMI noise suppression
- Virtually no distortion of high-speed signals
- Excellent thermal characteristics over temperature

# **Specifications**

- Number of Lines: Two
- Impedance range: 100 to 1400 ohms at 100 MHz
- Current Rating Range: 1.5 A to 16.5 A
- Operating Temperature Range: -40 °C to +125 °C
- Storage Temperature Range: -40 °C to +85 °C

# **Applications**

- Electromagnetic interference (EMI)
- Demanding adapter lines & battery lines
- Larger electronic equipment
- Personal Computers, Peripherals, IoT





# **PRODUCT IDENTIFICATION**

<u>SP DL 485025 - 500 - 2P - T</u>

(1) (2)

(3)

(4)

(5) (6)

(1) Type: Surface Mount Devices

(2) Style: Wire Wound Type Common Mode Filter

(3) Dimensions in mm:

CODE	WIDTH	LENGTH	HEIGHT
485025	4.8	5.0	2.5

(4) Impedance: 500 for 500  $\Omega$  (Impedance tolerance:  $\pm$  30%)

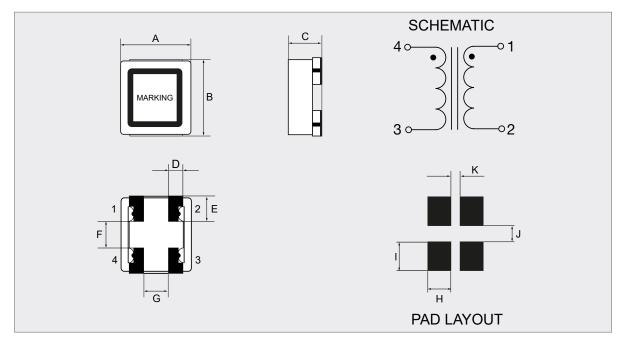
(5) 2P: 2 Lines

(6) Temperature product code: T = temp. -40 ~ 125 °C

# **MECHANICAL SPECIFICATIONS**

Dimensions are in mm.

SERIES							G ± 0.4				
SPDL485025	4.8	5.0	2.5	1.25	1.7	1.6	1.0	1.8	2.4	1.2	0.8



• Coplanarity: 0.15 Max







### Custom versions available upon request.

128 Atlantic Avenue, Lynbrook, NY 11563 Toll Free 866-239-5777 | Tel 516-239-5777 | Fax 516-239-7208 sales@signaltransformer.com | techhelp@signaltransformer.com

### **ELECTRICAL SPECIFICATIONS**

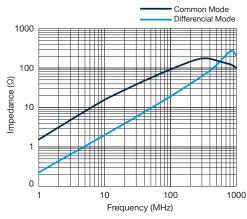
Electrical specifications for all part numbers measured at 25°C unless otherwise stated.

#### SPDL485025 SERIES

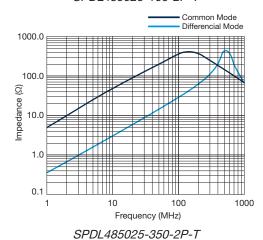
Part Number	Impedance @ 100 MHz (Ω)	DCR ± 40% (mΩ)	Rated Voltage (V) Max.	Insulation Resistance (ΜΩ) Min.	Rated Current (A) Max.	Withstand Voltage (V)
SPDL485025-100-2P-T	100	9	50	10	6.5	125
SPDL485025-250-2P-T	250	14	50	10	5.0	125
SPDL485025-350-2P-T	350	28	50	10	4.0	125
SPDL485025-500-2P-T	500	19	50	10	4.0	125
SPDL485025-1000-2P-T	1000	24	50	10	2.0	125
SPDL485025-1400-2P-T	1400	40	50	10	1.5	125

Test Frequency: 100 MHzImpedance tolerance: ±30%

#### **TYPICAL PERFORMANCE CURVES**



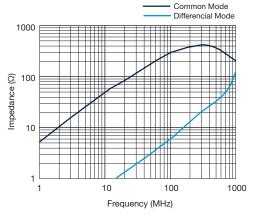
SPDL485025-100-2P-T



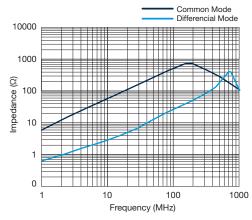
Signal TRANSFORMER del group







SPDL485025-250-2P-T

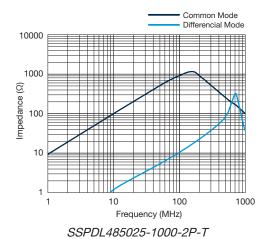


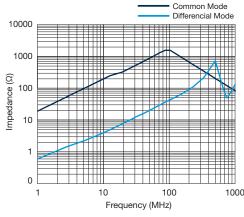
SPDL485025-500-2P-T

### Custom versions available upon request.

128 Atlantic Avenue, Lynbrook, NY 11563 Toll Free 866-239-5777 | Tel 516-239-5777 | Fax 516-239-7208 sales@signaltransformer.com | techhelp@signaltransformer.com

# SPDL485025 Series





SPDL485025-1400-2P-T

#### Test equipment

Z: measured on Agilent 4991A RF Impedance or equivalent

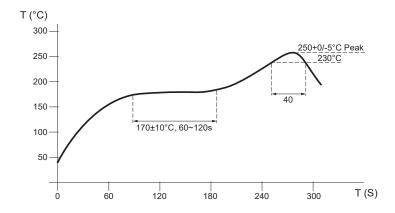
DCR: measured on Chroma 16502 micro micro-OHM meter or equivalent

Rated current: measured on Agilent 4284A LCR meter with 42841A Current Source or equivalent

#### Notice

There could be measurement deviations with different instruments due to different test principles / internal resistance. Open and Short compensation is performed before testing.

# **RECOMMENDED REFLOW SOLDERING CONDITIONS (SMT-TYP)**



#### ADD:

The recommended reflow conditions as above graph, is set according to our soldering equipment, due to various manufactures may have different reflow soldering equipment, products, process conditions, set methods, and so on. When setting the reflow conditions, please adjust and confirm according to users' environment/equipment.

#### Notice:

- a) Solder reflow temperature: +250°C Max. for 10 seconds max.
- b) To solder inductors by soldering iron is not recommended.
- c) Please contact us for details



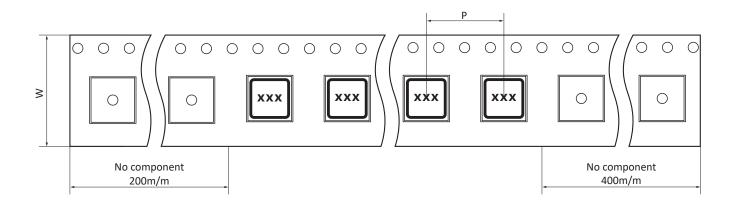


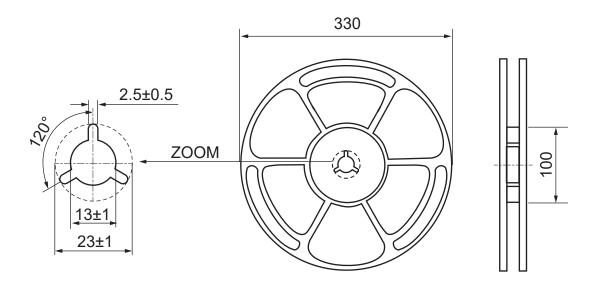


### Custom versions available upon request.

128 Atlantic Avenue, Lynbrook, NY 11563
Toll Free 866-239-5777 | Tel 516-239-5777 | Fax 516-239-7208
sales@signaltransformer.com | techhelp@signaltransformer.com

# TAPE AND REEL SPECIFICATIONS





Part Number	Reel Spec.	w	P	Pcs / Reel
SPDL485025	13"	12	8	2500

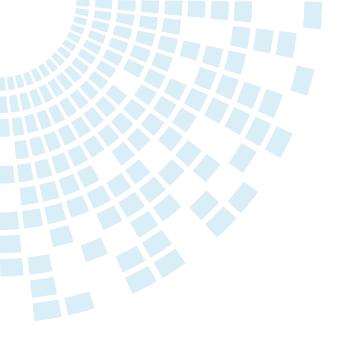
Taping Specification: EIA -481 Compliant





# Custom versions available upon request.

128 Atlantic Avenue, Lynbrook, NY 11563 Toll Free 866-239-5777 | Tel 516-239-5777 | Fax 516-239-7208 sales@signaltransformer.com | techhelp@signaltransformer.com



# **About Signal Transformer**

Signal Transformer is known as the world's leader of wire wound magnetic solutions since 1959. With over 50 years of experience manufacturing transformers, chokes, inductors and custom or modified standard products. Signal offers not only the most comprehensive line of certified standard power conversion products, with our vast engineering, manufacturing and regulatory resources; Signal Transformer excels in the design and manufacturer of cost effective, specialized platforms.



#### For more information, please contact us:

128 Atlantic Avenue Lynbrook, NY 11563

Toll Free +1 866-239-5777

Tel +1 516-239-5777

Fax +1 516-239-7208

sales@signaltransformer.com techhelp@signaltransformer.com



# **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Common Mode Chokes / Filters category:

Click to view products by Bel Fuse manufacturer:

Other Similar products are found below:

PE-64683 RD5122-6-9M6 ST6118T-R FE3X025-10-7NL T8114NLT TCM0806G-350-2P-T TCM0806G-650-2P-T IND-0110

UAL21VR0802000 UALSC023000000 UALSC1020JH000 UALSU10VD20010 UALSU9VD070100 36-00037 CM7060M132R-10

UALW21HS072450 UALSU9H0208000 UAL24VK06450CH PE-67531 TLH10UB 113 0R5 2752045447 CM8663Z161B-10 7351V

CMF16-153131 T8116NLT CMS2-10-R FE2X10-4-2NL T8003NLT CTX01-13663 CTX66-19521-R RC212-0.5-10M RC112-0.4-15M

RC212-0.6-6M8 RC212-0.4-15M RC112-0.3-30M 4534-3 WTCF2012Z0M751PB PH9408.814NLT B82498B3221J000 PAC6006.364NLT

PAC6006.444NLT PAC6006.204NLT PH9407.204NLT PAC6006.264NLT PH9408.105NLT PH9408.494NLT PAC6006.104NLT

CM6350R-683-REEL CUW43T-513T-AU CUW43T-104T-AU