

SLF12555T-470M1R6-PF Datasheet



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DiGi Electronics Part Number SLF12555T-470M1R6-PF-DG

Manufacturer TDK Corporation

Manufacturer Product Number SLF12555T-470M1R6-PF

Description FIXED IND 47UH 2.5A 74.2MOHM SMD

Detailed Description 47 µH Shielded Drum Core, Wirewound Inductor 2.5

A 74.2mOhm Max Nonstandard



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DiGi is a global authorized distributor of electronic components.



Purchase and inquiry

Manufacturer Product Number:	Manufacturer:
SLF12555T-470M1R6-PF	TDK Corporation
Series:	Product Status:
SLF	Obsolete
Type:	Material - Core:
Drum Core, Wirewound	Ferrite
Inductance:	Tolerance:
47 μΗ	±20%
Current Rating (Amps):	Current - Saturation (Isat):
2.5 A	1.6A
Shielding:	DC Resistance (DCR):
Shielded	74.2mOhm Max
Q @ Freq:	Frequency - Self Resonant:
Ratings:	Operating Temperature:
	-40°C ~ 105°C
Inductance Frequency - Test:	Mounting Type:
1 kHz	Surface Mount
Package / Case:	Supplier Device Package:
Nonstandard	
Size / Dimension:	Height - Seated (Max):
0.492" L x 0.492" W (12.50mm x 12.50mm)	0.228" (5.80mm)

Environmental & Export classification

8504.50.8000

RoHS Status:	Moisture Sensitivity Level (MSL):
ROHS3 Compliant	1 (Unlimited)
REACH Status:	ECCN:
REACH Unaffected	EAR99
HTSUS:	



Inductors for power circuits Wound ferrite SLF series







SLF12555 type













FEATURES

- Magnetic shield type wound inductor for power circuits.
- O Product lineup allows for various usages.
- Operating temperature range: -40 to +105°C (including self-temperature rise)

APPLICATION

Thin-screen TVs, LCDs, AV equipment, gaming equipment, other electrical devices

■ PART NUMBER CONSTRUCTION

SLF	12555	T	-	6R0	K	M	3R6	-	PF
Series name	L×W×H dimensions 12.5×12.5×5.5 mm	Packaging style		Inductance (µH)		Inductance tolerance	Rated curre (A)	nt	Internal code

CHARACTERISTICS SPECIFICATION TABLE

L		L measuring frequency	DC resistance	Rated curre	ent*	Part No.
				Isat	Itemp	
(µH)	Tolerance	(kHz)	(Ω)±20%	(A)max.	(A)typ.	
6	±30%	1	0.0164	3.6	4.9	SLF12555T-6R0N3R6-PF
10	±20%	1	0.0215	3.4	4.3	SLF12555T-100M3R4-PF
15	±20%	1	0.0259	2.8	3.9	SLF12555T-150M2R8-PF
22	±20%	1	0.0338	2.3	3.4	SLF12555T-220M2R3-PF
33	±20%	1	0.0415	1.9	3.1	SLF12555T-330M1R9-PF
47	±20%	1	0.0618	1.6	2.5	SLF12555T-470M1R6-PF
68	±20%	1	0.0832	1.3	2.2	SLF12555T-680M1R3-PF
100	±20%	1	0.117	1.1	1.8	SLF12555T-101M1R1-PF
150	±20%	1	0.19	0.88	1.4	SLF12555T-151MR88-PF
220	±20%	1	0.27	0.72	1.2	SLF12555T-221MR72-PF
330	±20%	1	0.41	0.59	1	SLF12555T-331MR59-PF
470	±20%	1	0.52	0.49	0.88	SLF12555T-471MR49-PF
680	±20%	1	0.76	0.43	0.73	SLF12555T-681MR43-PF
1000	±20%	1	1.12	0.34	0.6	SLF12555T-102MR34-PF
1500	±20%	1	1.73	0.29	0.48	SLF12555T-152MR29-PF

^{*} Rated current: smaller value of either Isat or Itemp.

Isat: When based on the inductance change rate (10% below the initial value)

Itemp: When based on the temperature increase (temperature increase of 30°C by self heating)

Measurement equipment

Measurement item	Product No.	Manufacturer
L	4194A	Keysight Technologies
DC resistance	VP-2941A	Panasonic
Rated current Isat	4284A+42841A+42842C	Keysight Technologies

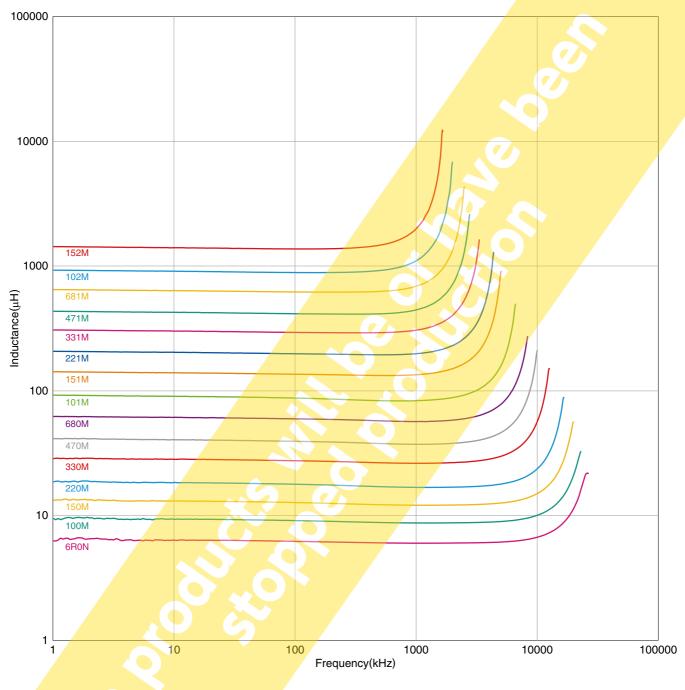
^{*} Equivalent measurement equipment may be used.



ATDK

SLF12555 type

L FREQUENCY CHARACTERISTICS



Measurement equipment

Product No. Manufacturer

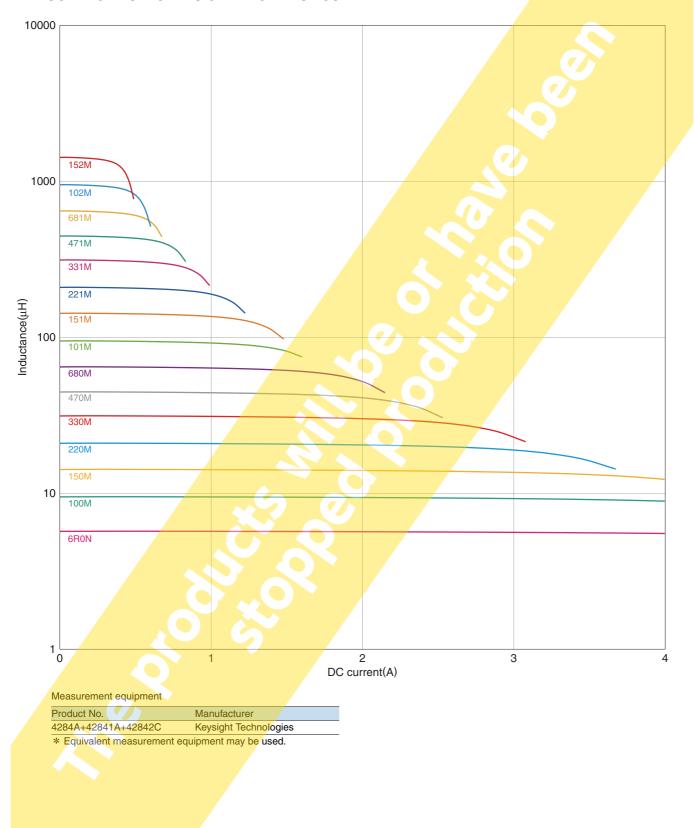
4294A Keysight Technologies

* Equivalent measurement equipment may be used.

公TDK

SLF12555 type

■INDUCTANCE VS. DC BIAS CHARACTERISTICS

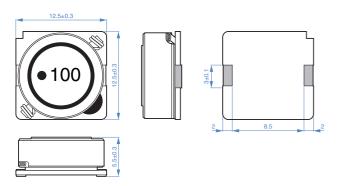


Please be sure to request delivery specifications that provide further details on the features and specifications of the products for proper and safe use. Please note that the contents may change without any prior notice due to reasons such as upgrading.

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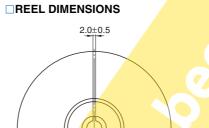
SLF12555 type

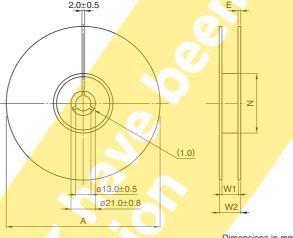
■ SHAPE & DIMENSIONS



Dimensions in mm

■ PACKAGING STYLE





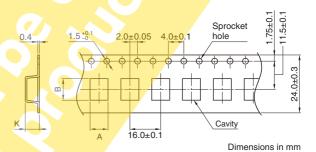
Dimensions in mm

RECOMMENDED LAND PATTERN



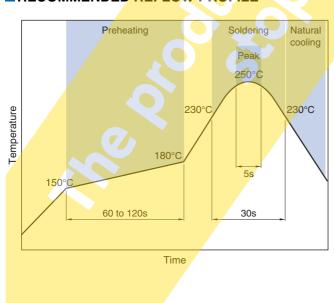
Dimensions in mm

TAPE DIMENSIONS



Type	Α	В	K
SI F12555	13	13	6

RECOMMENDED REFLOW PROFILE



PACKAGE QUANTITY

Package guantity	500 pcs/reel

■TEMPERATURE RANGE, INDIVIDUAL WEIGHT

Operating	Storage	Individual
temperature range*	temperature range**	weight
−40 to +105 °C	−40 to +105 °C	2.6 g

Operating temperature range includes self-temperature rise.

^{**} The storage temperature range is for after the assembly.



REMINDERS FOR USING THESE PRODUCTS

Before using these products, be sure to request the delivery specifications.

SAFETY REMINDERS

Please pay sufficient attention to the warnings for safe designing when using this products.

The storage period is within 6 months. Be sure to follow the storage conditions (temperature: 5 to 30°C, humidity: 10 to 75% RH or less). If the storage period elapses, the soldering of the terminal electrodes may deteriorate.
On not use or store in locations where there are conditions such as gas corrosion (salt, acid, alkali, etc.).
Before soldering, be sure to preheat components. The preheating temperature should be set so that the temperature difference between the solder temperature and chip temperature does not exceed 150°C.
Soldering corrections after mounting should be within the range of the conditions determined in the specifications. If overheated, a short circuit, performance deterioration, or lifespan shortening may occur.
When embedding a printed circuit board where a chip is mounted to a set, be sure that residual stress is not given to the chip due to the overall distortion of the printed circuit board and partial distortion such as at screw tightening portions.
Self heating (temperature increase) occurs when the power is turned ON, so the tolerance should be sufficient for the set thermal design.
Carefully lay out the coil for the circuit board design of the non-magnetic shield type. A malfunction may occur due to magnetic interference.
Use a wrist band to discharge static electricity in your body through the grounding wire.
On not expose the products to magnets or magnetic fields.
On not use for a purpose outside of the contents regulated in the delivery specifications.
The products listed on this catalog are intended for use in general electronic equipment (AV equipment, telecommunications equip-

ment, home appliances, amusement equipment, computer equipment, personal equipment, office equipment, measurement equip-

The products are not designed or warranted to meet the requirements of the applications listed below, whose performance and/or quality require a more stringent level of safety or reliability, or whose failure, malfunction or trouble could cause serious damage to society,

If you intend to use the products in the applications listed below or if you have special requirements exceeding the range or conditions

- (1) Aerospace/aviation equipment
- (2) Transportation equipment (cars, electric trains, ships, etc.)

ment, industrial robots) under a normal operation and use condition.

(3) Medical equipment

person or property.

(4) Power-generation control equipment

set forth in the each catalog, please contact us.

- (5) Atomic energy-related equipment
- (6) Seabed equipment
- (7) Transportation control equipment

- (8) Public information-processing equipment
- (9) Military equipment
- (10) Electric heating apparatus, burning equipment
- (11) Disaster prevention/crime prevention equipment
- (12) Safety equipment
- (13) Other applications that are not considered general-purpose applications

When designing your equipment even for general-purpose applications, you are kindly requested to take into consideration securing protection circuit/device or providing backup circuits in your equipment.



OUR CERTIFICATE

DiGi provide top-quality products and perfect service for customer worldwide through standardization, technological innovation and continuous improvement. DiGi through third-party certification, we striciy control the quality of products and services. Welcome your RFQ to Email: Info@DiGi-Electronics.com

















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