Disc	continue Issue Date	Last Purcha	se Order Date	Last Shipment I	Date		
	May.14, 2024	March	.31, 2026	December.31, 2	026 * Please r	refer to our Web s	site about replacement information.
			- ,				
I	NDUC	TORS	5				<b>⊗TDK</b>
Induc	ctors for power	circuits					
Wou	nd ferrite						
	series						RoHS REACH Halogen Lead Free Free
SLL 8	series						
		_					
SL	.F7045	type				Product Portal	earch Simulation Model Selection Guide Tech Library Tech Note
FE	EATURES						
	Magnetic shield t			power circuits.			
	Product lineup all		-				
$\bigcirc$	Operating tempe	rature range	e: -40 to +10	5°C (including s	self-temperature	e rise)	
AF	PPLICATION						
- _			auinmont a		nt other electric		
- _	PPLICATION	LCDs, AV e	equipment, ga	aming equipme	nt, other <mark>electric</mark>	al devices	
- _		LCDs, AV e	equipment, ga	aming equipme	nt, other <mark>electric</mark>	al devices	
01	Thin-screen TVs,			aming equipmer	nt, other electric	cal devices	
01				aming equipme	nt, other electric	al devices	5
 PA	Thin-screen TVs, ART NUMBER			aming equipmen	nt, other electric	al devices	- PF
 ■P# SI	Thin-screen TVs, ART NUMBER LF 70	CONSTR 45		-  3R3	M	2R5	
⊃1 ■PA SI	Thin-screen TVs, ART NUMBER LF 70 wries L×W×Hdi	CONSTR 45	UCTION T Packaging	- 3R3	M	2R5 <sup>定格?</sup> 流	Internal
⊃1 ■PA SI	Thin-screen TVs, ART NUMBER LF 70 wries L×W×Hdi	CONSTR 45		-  3R3	M	2R5	
⊃1 ■PA SI	Thin-screen TVs, ART NUMBER LF 70 wries L×W×Hdi	CONSTR 45	UCTION T Packaging	- 3R3	M	2R5 <sup>定格?</sup> 流	Internal
PA SI Se na	Thin-screen TVs, ART NUMBER LF 70 Infies L×W×Hdi 7.0×7.0	CONSTR 45 mensions ×4.5 mm	UCTION T Packaging style	- 3R3 Inductance (µH)	M	2R5 <sup>定格?</sup> 流	Internal
PA SI Se na	Thin-screen TVs, ART NUMBER LF 70 wries L×W×Hdi	CONSTR 45 mensions ×4.5 mm	UCTION T Packaging style CIFICATIO	- 3R3 Inductance (µH) N TABLE	M Inductance tolerance	2R5 <sup>定格?</sup> 流	Internal code
PA SI Se na	Thin-screen TVs, ART NUMBER LF 70 Infies L×W×Hdi 7.0×7.0	CONSTR 45 mensions ×4.5 mm TICS SPE LMeasuring	UCTION T Packaging style CIFICATIO	- 3R3 Inductance (µH) N TABLE	M	2R5 <sup>定格?</sup> 流	Internal
PA SI Se na	Thin-screen TVs, ART NUMBER LF 70 Infies L×W×Hdi 7.0×7.0	CONSTR 45 mensions ×4.5 mm	UCTION T Packaging style CIFICATIO	- 3R3 Inductance (µH) N TABLE istance	M Inductance tolerance	2R5 定格? 流 (A)	Internal code
⊂1 PA SI Se na CH	Thin-screen TVs, ART NUMBER LF 70 wries L×W×Hdi 7.0×7.0 HARACTERIS	CONSTR 45 mensions ×4.5 mm TICS SPE LMeasuring frequency	UCTION T Packaging style CIFICATIO DC resi	- 3R3 Inductance (µ́H) N TABLE istance	M Inductance tolerance	2R5 定格? 流 (A)	Internal code
PA Se na CH L	Thin-screen TVs, ART NUMBER LF 70 wries ame L×W×Hdi 7.0×7.0 HARACTERIS	CONSTR 45 mensions ×4.5 mm TICS SPE LMeasuring frequency (kHz)	UCTION T Packaging style CIFICATIO DC resi (Ω)±20	- 3R3 Inductance (μH) N TABLE istance	M Inductance tolerance Rated current* sat A)max.	2R5 定格? 流 (A) Itemp (A)typ.	Internal code
Ο1 PA Se na CH L (μH) 3.3	Thin-screen TVs, ART NUMBER LF 70 wries ame L×W×Hdi 7.0×7.0 HARACTERIS	CONSTR 45 mensions ×4.5 mm TICS SPE LMeasuring frequency (kHz) 100	UCTION T Packaging style CIFICATIO DC resi (Ω)±20 0.02	- 3R3 Inductance (µH) N TABLE istance p%	M Inductance tolerance Rated current* sat A)max. 2.5	2R5 定格? 流 (A) Itemp (A)typ. 2.3	Part No.
□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	Thin-screen TVs, ART NUMBER LF 70 rries ame L×W×Hdi 7.0×7.0 HARACTERIS HARACTERIS	CONSTR 45 mensions ×4.5 mm TICS SPE LMeasuring frequency (kHz) 100 100	UCTION T Packaging style CIFICATIO DC resi (Q)±20 0.02 0.03	- 3R3 Inductance (µH) N TABLE istance	M Inductance tolerance Rated current* sat A)max.	2R5 定格? 流 (A) Itemp (A)typ.	Part No. SLF7045T-3R3M2R5-PE SLF7045T-4R7M2R0-PE
Ο1 PA Se na CH L (μH) 3.3	Thin-screen TVs, ART NUMBER LF 70 rries L×W×Hdi 7.0×7.0 HARACTERIS Tolerance ±20% ±20% ±20%	CONSTR 45 mensions ×4.5 mm TICS SPE LMeasuring frequency (kHz) 100	UCTION T Packaging style CIFICATIO DC resi ( <u>() ±20</u> 0.02 0.03 0.039	- 3R3 Inductance (µH) N TABLE istance p%	M Inductance tolerance Rated current* sat A)max. 2.5	2R5 定榜? 流 (A)	Part No.
□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	Thin-screen TVs, ART NUMBER LF 70 rries ame L×W×Hdi 7.0×7.0 HARACTERIS HARACTERIS	CONSTR 45 mensions ×4.5 mm TICS SPE LMeasuring frequency (kHz) 100 100	UCTION T Packaging style CIFICATIO DC resi (Q)±20 0.02 0.03	- 3R3 Inductance (µH) N TABLE istance p% ( 2 2 1 1	M Inductance tolerance Rated current* sat A)max. 2.5 2	2R5 定格? 流 (A) Itemp (A)typ. 2.3 2.1	Part No. SLF7045T-3R3M2R5-PE SLF7045T-4R7M2R0-PE SLF7045T-6R8M1R7-PE
○1 PA Se na CH L (µH) 3.3 4.7 6.8 10	Thin-screen TVs, ART NUMBER LF 70 tries tries L×W×Hdi 7.0×7.0 HARACTERIS Tolerance ±20% ±20% ±20% ±20%	CONSTR 45 mensions ×4.5 mm FICS SPE LMeasuring frequency (kHz) 100 100 100 100	UCTION T Packaging style CIFICATIO DC resi ( <u>() ±20</u> 0.02 0.03 0.039 0.036	- 3R3 Inductance (µH) N TABLE istance p%	Inductance tolerance	2R5 定橋? 流 (A)	Part No. SLF7045T-3R3M2R5-PF SLF7045T-4R7M2R0-PF SLF7045T-6R8M1R7-PF SLF7045T-100M1R3-PF
○1 PA Se na CH L (µH) 3.3 4.7 6.8 10 15 22	Thin-screen TVs,           ART NUMBER           LF         70           eries         L×W×Hdi           ame         1.0×7.0           HARACTERIST           ±20%           ±20%           ±20%           ±20%           ±20%           ±20%           ±20%           ±20%           ±20%           ±20%	CONSTR 45 mensions ×4.5 mm TICS SPE LMeasuring frequency (kHz) 100 100 100 100	UCTION T Packaging style CIFICATIO DC resi (0)±20 0.02 0.03 0.039 0.036 0.052	- 3R3 Inductance (µH) N TABLE istance p%	Inductance tolerance         Rated current*         sat         A)max.         2.5         2.7         .3         .1         0.9	2R5 定橋? 流 (A)	Internal code           Part No.           SLF7045T-3R3M2R5-PF           SLF7045T-4R7M2R0-PF           SLF7045T-6R8M1R7-PF           SLF7045T-100M1R3-PF           SLF7045T-150M1R1-PF           SLF7045T-220MR90-PF
Ο1 PA Se na CH L (μH) 3.3 4.7 6.8 10 15	Thin-screen TVs,           ART NUMBER           LF         70           arries         L×W×Hdi           arme         L×0×7.0           HARACTERIST           ±20%         ±20%           ±20%         ±20%           ±20%         ±20%           ±20%         ±20%           ±20%         ±20%	CONSTR 45 mensions ×4.5 mm TICS SPE LMeasuring frequency (kHz) 100 100 100 100 100 100 100	UCTION T Packaging style CIFICATIO DC resi (Ω) ± 20 0.02 0.03 0.039 0.036 0.052 0.061	- 3R3 Inductance (µH) N TABLE istance p%	Inductance tolerance	2R5 定橋? 流 (A)	Part No. SLF7045T-3R3M2R5-PF SLF7045T-4R7M2R0-PF SLF7045T-6R8M1R7-PF SLF7045T-100M1R3-PF SLF7045T-150M1R1-PF
PA Se na na CH L (µH) 3.3 4.7 6.8 10 15 22 33	Thin-screen TVs,           ART NUMBER           LF         70           uries         L×W×Hdi           ame         2.0×7.0           HARACTERIS         4.00%           ±20%         ±20%           ±20%         ±20%           ±20%         ±20%           ±20%         ±20%           ±20%         ±20%	CONSTR 45 mensions ×4.5 mm TICS SPE LMeasuring frequency (kHz) 100 100 100 100 100 100 100 10	UCTION T Packaging style CIFICATIO DC resi (Ω) ±20 0.03 0.039 0.036 0.052 0.061 0.096	- 3R3 Inductance (µH) N TABLE istance	Inductance tolerance         Rated current*         sat         A)max.         2.5         2.7         .3         .1         0.9         0.82	2R5 定格? 流 (A)	Internal code           Part No.           SLF7045T-3R3M2R5-PF           SLF7045T-4R7M2R0-PF           SLF7045T-6R8M1R7-PF           SLF7045T-100M1R3-PF           SLF7045T-150M1R1-PF           SLF7045T-150M1R1-PF           SLF7045T-330MR82-PF
PA Se na na Se 10 10 10 11 12 12 13 15 15 22 33 47	Thin-screen TVs,           ART NUMBER           LF         70           understand         LxWxHdi           tries         LxWxHdi           ame         LxWxHdi           tries         LxWxHdi <t< td=""><td>CONSTR 45 mensions ×4.5 mm TICS SPE LMeasuring frequency (kHz) 100 100 100 100 100 100 100 10</td><td>UCTION T Packaging style CIFICATIO DC resi (Ω)±20 0.03 0.039 0.036 0.052 0.061 0.096 0.096</td><td>- 3R3 Inductance (µH) NTABLE</td><td>Inductance tolerance</td><td>2R5 定格? 流 (A)</td><td>Internal code           Part No.           SLF7045T-3R3M2R5-PF           SLF7045T-4R7M2R0-PF           SLF7045T-6R8M1R7-PF           SLF7045T-100M1R3-PF           SLF7045T-150M1R1-PF           SLF7045T-220MR90-PF           SLF7045T-330MR82-PF           SLF7045T-4770MR75-PF</td></t<>	CONSTR 45 mensions ×4.5 mm TICS SPE LMeasuring frequency (kHz) 100 100 100 100 100 100 100 10	UCTION T Packaging style CIFICATIO DC resi (Ω)±20 0.03 0.039 0.036 0.052 0.061 0.096 0.096	- 3R3 Inductance (µH) NTABLE	Inductance tolerance	2R5 定格? 流 (A)	Internal code           Part No.           SLF7045T-3R3M2R5-PF           SLF7045T-4R7M2R0-PF           SLF7045T-6R8M1R7-PF           SLF7045T-100M1R3-PF           SLF7045T-150M1R1-PF           SLF7045T-220MR90-PF           SLF7045T-330MR82-PF           SLF7045T-4770MR75-PF
PA Se na na Se na 1 Se na 1 <td>Thin-screen TVs,           ART NUMBER           LF         70           Instruction         Instruction           tries         L×W×Hding           Instruction         Instruction           HARACTERIST         Instruction           table         table           tabl</td> <td>CONSTR 45 mensions ×4.5 mm TICS SPE LMeasuring frequency (kHz) 100 100 100 100 100 100 100 10</td> <td>UCTION T Packaging style CIFICATIO DC resi (Ω)±20 0.03 0.039 0.036 0.052 0.061 0.096 0.125 0.175</td> <td>- 3R3 Inductance (µH) N TABLE</td> <td>Inductance tolerance         Rated current*         sat         A)max.         2.5         2.7         .3         .1         0.9         0.82         0.75         0.6</td> <td>2R5 定格? 流 (A) (A)</td> <td>Internal code           Part No.           SLF7045T-3R3M2R5-PF SLF7045T-4R7M2R0-PF SLF7045T-6R8M1R7-PF SLF7045T-6R8M1R7-PF SLF7045T-100M1R3-PF SLF7045T-150M1R1-PF SLF7045T-150M1R1-PF SLF7045T-1200MR90-PF SLF7045T-330MR82-PF SLF7045T-330MR82-PF SLF7045T-680MR60-PF</td>	Thin-screen TVs,           ART NUMBER           LF         70           Instruction         Instruction           tries         L×W×Hding           Instruction         Instruction           HARACTERIST         Instruction           table         table           tabl	CONSTR 45 mensions ×4.5 mm TICS SPE LMeasuring frequency (kHz) 100 100 100 100 100 100 100 10	UCTION T Packaging style CIFICATIO DC resi (Ω)±20 0.03 0.039 0.036 0.052 0.061 0.096 0.125 0.175	- 3R3 Inductance (µH) N TABLE	Inductance tolerance         Rated current*         sat         A)max.         2.5         2.7         .3         .1         0.9         0.82         0.75         0.6	2R5 定格? 流 (A) (A)	Internal code           Part No.           SLF7045T-3R3M2R5-PF SLF7045T-4R7M2R0-PF SLF7045T-6R8M1R7-PF SLF7045T-6R8M1R7-PF SLF7045T-100M1R3-PF SLF7045T-150M1R1-PF SLF7045T-150M1R1-PF SLF7045T-1200MR90-PF SLF7045T-330MR82-PF SLF7045T-330MR82-PF SLF7045T-680MR60-PF
○1 PA Se na na SI Se na 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10	Thin-screen TVs,         ART NUMBER         LF       70         vries       L×W×Hdi         ame       1.0×7.0         HARACTERIST         ±20%         ±20%         ±20%         ±20%         ±20%         ±20%         ±20%         ±20%         ±20%         ±20%         ±20%         ±20%         ±20%         ±20%         ±20%         ±20%         ±20%	CONSTR 45 mensions ×4.5 mm TICS SPE LMeasuring frequency (kHz) 100 100 100 100 100 100 100 10	UCTION T Packaging style CIFICATIO DC resi (Ω)±20 0.03 0.039 0.036 0.039 0.036 0.052 0.061 0.096 0.052 0.061 0.096	- 3R3 Inductance (µH) N TABLE istance F 0% (2 2 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0	Inductance tolerance         Rated current*         sat         A)max.         2.5         2.7         .3         .1         0.9         0.82         0.75         0.6         0.5	2R5 定格? 流 (A) (A)	Internal code           Part No.           SLF7045T-3R3M2R5-PF SLF7045T-4R7M2R0-PF SLF7045T-6R8M1R7-PF SLF7045T-6R8M1R7-PF SLF7045T-100M1R3-PF SLF7045T-100M1R3-PF SLF7045T-100M1R3-PF SLF7045T-100M1R3-PF SLF7045T-100M1R3-PF SLF7045T-330MR82-PF SLF7045T-470MR75-PF SLF7045T-680MR60-PF SLF7045T-101MR50-PF
☐ PA Se na ■ CH ■	Thin-screen TVs,           ART NUMBER           LF         70           uries         L×W×Hdi           ame         2.0×7.0           HARACTERIST           ±20%         ±20%           ±20%         ±20%           ±20%         ±20%           ±20%         ±20%           ±20%         ±20%           ±20%         ±20%           ±20%         ±20%           ±20%         ±20%           ±20%         ±20%           ±20%         ±20%           ±20%         ±20%           ±20%         ±20%	CONSTR 45 mensions ×4.5 mm TICS SPE LMeasuring frequency (kHz) 100 100 100 100 100 100 100 10	UCTION T Packaging style CIFICATIO DC resi (Ω)±2C 0.02 0.03 0.039 0.036 0.052 0.061 0.096 0.125 0.175 0.25 0.34	- 3R3 Inductance (µH) N TABLE istance F 0% (1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Inductance tolerance         Rated current*         sat         A)max.         2.5         2.7         1.1         0.9         0.82         0.75         0.6         0.5         0.4	2R5 定格? 流 (A)	Internal code           Part No.           SLF7045T-3R3M2R5-PF           SLF7045T-4R7M2R0-PF           SLF7045T-6R8M1R7-PF           SLF7045T-100M1R3-PF           SLF7045T-100M1R3-PF           SLF7045T-150M1R1-PF           SLF7045T-150M1R1-PF           SLF7045T-150M1R1-PF           SLF7045T-150M1R1-PF           SLF7045T-680MR60-PF           SLF7045T-680MR60-PF           SLF7045T-680MR60-PF           SLF7045T-101MR50-PF           SLF7045T-151MR40-PF

100 1000 \* Ba ±20% 100 2.28

100

Rated current: smaller value of either Isat or Itemp. Isat: When based on the inductance change rate (10 below the nominal value)

Itemp: When based on the temperature increase (temperature increase of 20 by self heating)

1.05

1.48

#### **Measurement equipment**

±20%

±20%

470

680

Measurement item	Product No.	Manufacturer				
L	4194A	Keysight Technologies				
DC resistance	VP-2941A	Panasonic				
Rated current Isat	4284A+42841A+42842C	Keysight Technologies				
* Envirement and a submant and in the set						

Equivalent measurement equipment may be used.



A Please be sure to request delivery specifications that providefurt her 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. (1/5) 20240527

0.2

0.14

inductor\_commercial\_power\_slf7045\_en

SLF7045T-471MR22-PF SLF7045T-681MR20-PF

SLF7045T-102MR14-PF

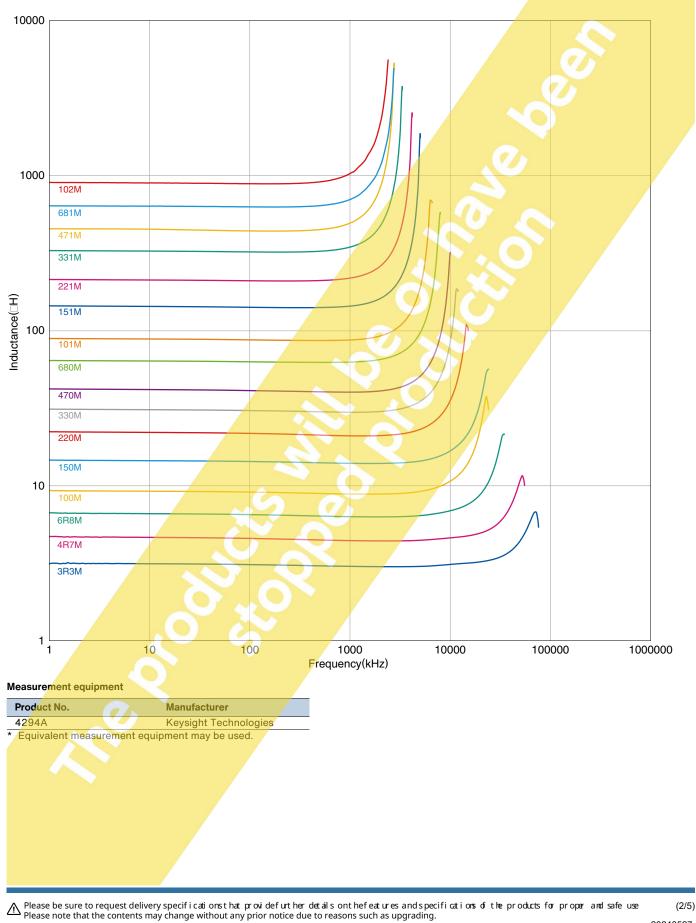
0.31

0.27

0.25

# SLF7045 type

### L FREQUENCY CHARACTERISTICS

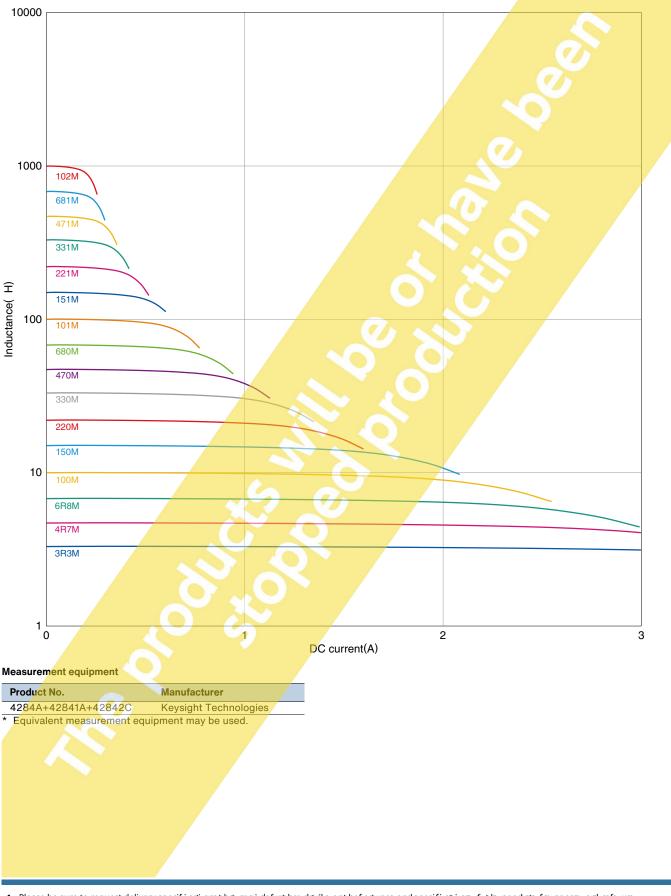


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## **⊘TD**K

# SLF7045 type

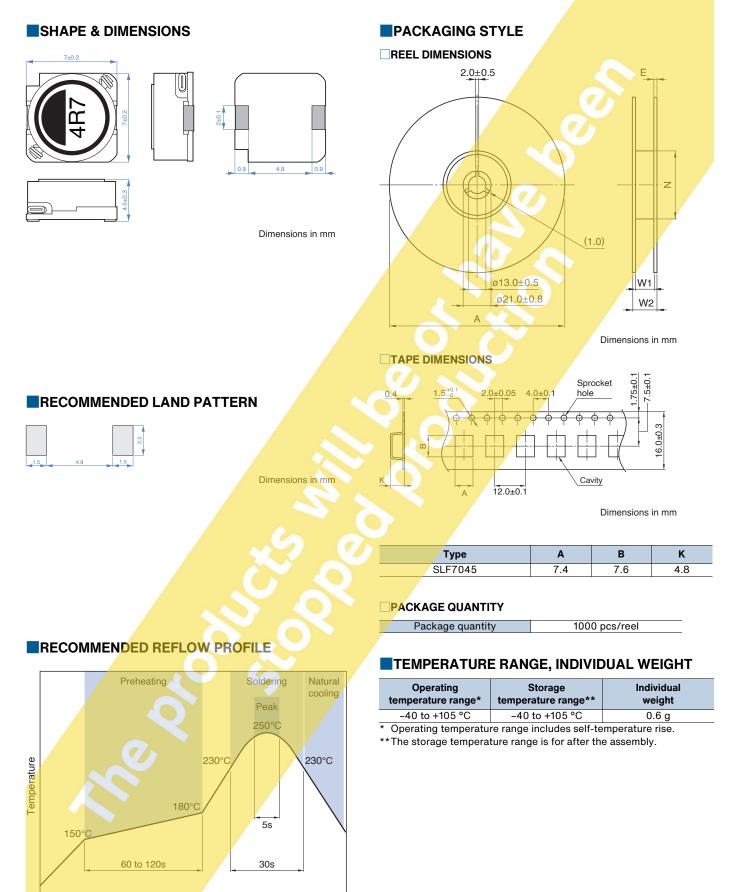
### **INDUCTANCE VS. DC BIAS CHARACTERISTICS**



 Please be sure to request delivery specifications that providefulther details on the features and specifications of the products for proper and safe use
 (3/5)

 Please note that the contents may change without any prior notice due to reasons such as upgrading.
 20240527

## SLF7045 type



A Please be sure to request delivery specifications that providefurt her 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. (4/5)

Time

#### 20240527

### INDUCTORS

### ⊗TDK

## **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

### REMINDERS

OThe 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.

- ODo not use or store in locations where there are conditions such as gas corrosion (salt, acid, alkali, etc.).
- OBefore 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.
- Osoldering 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.
- Owhen 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.
- Ouse a wrist band to discharge static electricity in your body through the grounding wire.
- ODo not expose the products to magnets or magnetic fields.
- Ob not use for a purpose outside of the contents regulated in the delivery specifications.
- OThe products listed on this catalog are intended for use in general electronic equipment (AV equipment, telecommunications equipment, home appliances, amusement equipment, computer equipment, personal equipment, office equipment, measurement equipment, industrial robots) under a normal operation and use condition.

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, person or property.

If you intend to use the products in the applications listed below or if you have special requirements exceeding the range or conditions set forth in the each catalog, please contact us.

- (1) Aerospace/aviation equipment
- (2) Transportation equipment (cars, electric trains, ships, etc.)
- (3) Medical equipment
- (4) Power-generation control equipment
- (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.

inductor commercial power slf7045 en