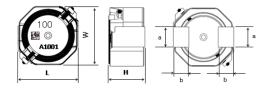
Spec Sheet

SMD Power Inductors for Automotive (Grade1)/ Industrial Applications (ES series)

EST1060T4R7NDGA



Features

- Item Summary

4.7uH±30%, 5.5A, 10.1x10.0x6.0mm

- Lifecycle Stage
- Mass Production
- AEC-Q200 qualified
- Standard packaging quantity (minimum)
 - Taping 2000pcs(500pcs*4reel)

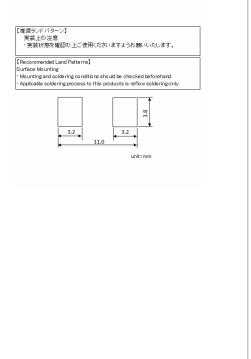
Products characteristics table

Inductance	4.7 uH ± 30 %
Case Size (mm)	10.1×10.0
Rated Current (max)	5.5 A
Saturation Current (max)	5.8 A
Saturation Current (typ)	8 A
Temperature Rise Current (max)	5.5 A
Temperature Rise Current (typ)	6.8 A
DC Resistance (max)	14 mΩ
DC Resistance (typ)	11 mΩ
LQ Measuring Frequency	100 kHz
Self Resonant Frequency (min) (Reference Value) Operating Temp. Range	32 MHz *ref. *ref. : reference value -55 to +150 °C
	(Including-self-generated heat)
Temperature characteristic (Inductance change)	± 20 %
RoHS2 Compliance (10 subst.)	Yes
REACH Compliance (173 subst.)	Yes
Soldering	Reflow

External Dimensions

Dimension L	10.1 ±0.3 mm
Dimension W	10.0 ±0.3 mm
Dimension H	6.0 ±0.3 mm
Dimension a	$3.5 \pm 0.15 \text{ mm}$
Dimension b	2.65 ± 0.2 mm

Recommended Land Patterns



The data is reference only. Electrical characteristics vary depending on environment or measurement condition. TAIYO YUDEN reserves the right to make change to the data at any time without notice. Before making final selection, please check product specification. 2018.01.12

TAIYO YUDEN

-Electrical Characteristics Data- 2017/1

unit : inch

(0.398 +/- 0.012)

SMD Power Inductors for Automotive(Grade1)/ Industrial Applications (ES series)

Dimension

Length :

EST1060T4R7NDGA

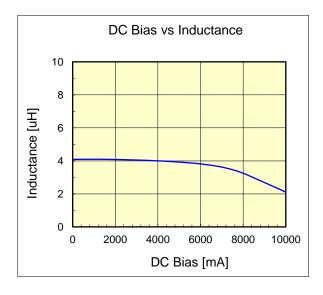


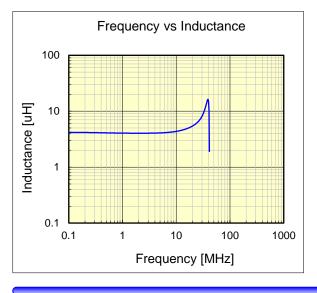
AEC-Q200 qualified

Width : 10.0 +/- 0.3 (0.394 +/- 0.012) 6.0 +/-0.3 Height : (0.236 +/- 0.012) Inductance : 4.7 uН (test freq at 0.1MHz) DC Resistance : 0.011 / 0.014 ohm (typ / max) Saturation Current : 8.00 / 5.80 A (typ/max) Temp. rise Current : 6.80 / 5.50 A (typ/max) Saturation current typical: 30% reduction from initial L value. Temp rise Current typical : Temperature will rise by 40 deg C

unit : mm

10.1 + / - 0.3





DC Bias vs Temperature 60 Self-temperature rise [deg] 50 40 30 20 10 0 4000 8000 12000 16000 0 20000 DC Bias [mA]

The data is reference only. Electrical characteristics vary depending on environment or measurement condition. TAIYO YUDEN reserves the right to make change to the data at any time without notice. Before making final selection, please check product specification.

The products are tested based on the test conditions and methods defined in AEC-Q200. Please consult with TAIYO YUDEN for the details of the product specification and AEC-Q200 test results, etc., and please review and approve TAIYO YUDEN's product specification before ordering. Please read this notice before using the TAIYO YUDEN products.

REMINDERS

- Please conduct validation and verification of our products in actual condition of mounting and operating environment before using our products.
- The product listed in this spec sheet is intended for use in general electronic equipment (e.g., AV equipment, OA equipment, home electric appliances, office equipment, information and communication equipment), medical equipment classified as Class I or II by IMDRF, industrial equipment, and automotive interior applications, etc. Please be sure to contact TAIYO YUDEN for further information before using the product for any equipment which may directly cause loss of human life or bodily injury (e.g., transportation equipment including, without limitation, automotive powertrain control system, train control system, and ship control system, traffic signal equipment, medical equipment classified as Class III by IMDRF).

Please do not incorporate our products into any equipment requiring high levels of safety and/or reliability (e.g., aerospace equipment, aviation equipment*, medical equipment classified as Class IV by IMDRF, nuclear control equipment, undersea equipment, military equipment).

*Note: There is a possibility that our products can be used only for aviation equipment that does not directly affect the safe operation of aircraft (e.g., in-flight entertainment, cabin light, electric seat, cooking equipment) if such use meets requirements specified separately by TAIYO YUDEN. Please be sure to contact TAIYO YUDEN for further information before using our products for such aviation equipment.

When our products are used even for high safety and/or reliability-required devices or circuits of general electronic equipment, it is strongly recommended to perform a thorough safety evaluation prior to use of our products and to install a protection circuit as necessary.

Please note that unless you obtain prior written consent of TAIYO YUDEN, TAIYO YUDEN shall not be in any way responsible for any damages incurred by you or third parties arising from use of the product listed in this spec sheet for any equipment requiring inquiry to TAIYO YUDEN or prohibited for use by TAIYO YUDEN as described above.

- Information contained in this spec sheet is intended to convey examples of typical performances and/or applications of our products and is not intended to make any warranty with respect to the intellectual property rights or any other related rights of TAIYO YUDEN or any third parties nor grant any license under such rights.
- Please note that the scope of warranty for our products is limited to the delivered our products themselves and TAIYO YUDEN shall not be in any way responsible for any damages resulting from a fault or defect in our products. Notwithstanding the foregoing, if there is a written agreement (e.g., supply and purchase agreement, quality assurance agreement) signed by TAIYO YUDEN and your company, TAIYO YUDEN will warrant our products in accordance with such agreement.
- The contents of this spec sheet are applicable to our products which are purchased from our sales offices or authorized distributors (hereinafter "TAIYO YUDEN's official sales channel"). Please note that the contents of this spec sheet are not applicable to our products purchased from any seller other than TAIYO YUDEN's official sales channel.

Caution for Export

The product listed in this spec sheet may require specific procedures for export according to "U.S. Export Administration Regulations", "Foreign Exchange and Foreign Trade Control Law" of Japan, and other applicable regulations. Should you have any questions on this matter, please contact our sales staff.

TAIYO YUDEN

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Fixed Inductors category:

Click to view products by Taiyo Yuden manufacturer:

Other Similar products are found below :

CR43NP-680KC CR54NP-820KC CR54NP-8R5MC CTX32CT-100 70F224AI MGDQ4-00004-P MHL1ECTTP18NJ MHL1JCTTD12NJ PE-51506NL PE-53601NL PE-53602NL PE-53630NL PE-53824SNLT PE-62892NL PE-92100NL PG0434.801NLT PG0936.113NLT 9310-16 PM06-2N7 PM06-39NJ A01TK 1206CS-471XJ HC2-2R2TR HC2LP-R47-R HC3-2R2-R 1206CS-151XG RCH664NP-140L RCH664NP-4R7M RCH8011NP-221L RCP1317NP-332L RCP1317NP-391L RCR1010NP-470M RCR110DNP-331L DH2280-4R7M DS1608C-106 ASPI-4020HI-R10M-T B10TJ B82477P4333M B82498B3101J000 B82498B3680J000 ELJ-RE27NJF2 1812CS-153XJ 1812CS-183XJ 1812CS-223XJ 1812LS-104XJ 1812LS-105XJ 1812LS-124XJ 1812LS-154XJ 1812LS-223XJ 1812LS-224XJ