

Inductors

Wound Type for Power Circuit SMD

LDR Series LDR655312 Type

These products are low height type power inductors optimum to a DC-DC converter for driving an LCD panel. A plane accuracy of a user terminal is increased by separating a winding terminal. In addition, an application of a new-designed thin type drum core significantly lowers leakage flux so as to satisfy needs for high density mounting.

FEATURES

- The first low height realized by using new magnetic material superior in superimposed DC current characteristics with high specific resistance and by adopting a design in which a lead frame is directly bonded.
- Mountable on the back side of the LCD surface because of low height type (1.20mm max.).
- Low leakage flux drum core with original design applied.
- Size equivalent to a half of a conventional core having the same characteristics realized, thus enabling light weight (0.1g max.).
- Automatic inserter usable in taping specifications.
- All terminals are welded without lead.

APPLICATIONS

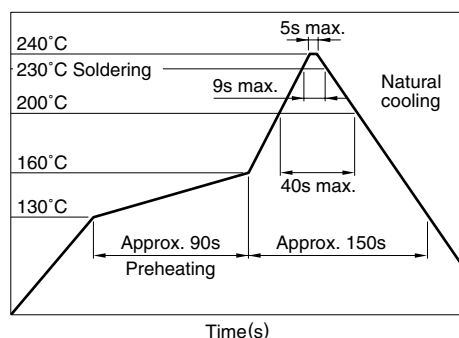
LCD driving circuits (DC-DC converters) such as notebook-sized personal computers, portable terminal equipment, game units

SPECIFICATIONS

Operating temperature range	-25 to +85°C [Including self-temperature rise]
Storage temperature range	-40 to +85°C[Unit of products]

RECOMMENDED SOLDERING CONDITIONS

REFLOW SOLDERING



PRODUCT IDENTIFICATION

LDR	655312	T-	2R2	W
(1)	(2)	(3)	(4)	(5)

(1) Series name

(2) DimensionsL×W×T

655312	6.5×5.3×1.2mm
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(3) Packaging style

T	Taping(reel)
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(4) Inductance value

2R2	2.2μH
100	10μH

(5)Variation code

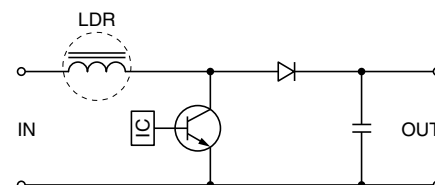
W	Welding
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PACKAGING STYLE AND QUANTITIES

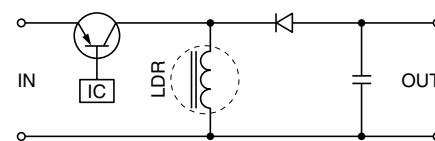
Packaging style	Quantity
Taping	3000 pieces/reel

APPLICATION EXAMPLES

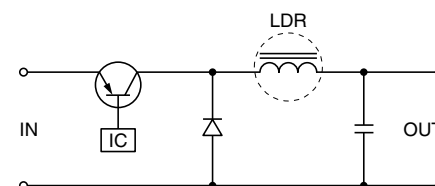
Step-up chopper circuit



Inverting chopper circuit



Step-down chopper circuit

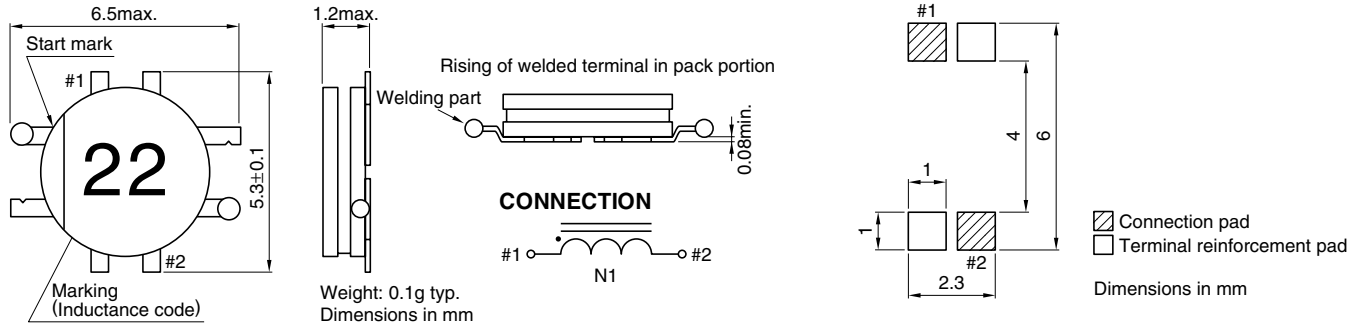


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SMD

SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN



ELECTRICAL CHARACTERISTICS

Inductance (μH)	Inductance tolerance (%)	Test frequency L (kHz)	DC resistance (Ω)±20%	Rated current (A)* max.	Part No.
2.2	±20	100	0.125	1.2	LDR655312T-2R2W
3.3	±20	100	0.155	0.96	LDR655312T-3R3W
4.7	±20	100	0.206	0.9	LDR655312T-4R7W
6.8	±20	100	0.24	0.8	LDR655312T-6R8W
10	±20	100	0.37	0.7	LDR655312T-100W
15	±20	100	0.46	0.6	LDR655312T-150W
22	±20	100	0.668	0.5	LDR655312T-220W
33	±20	100	1.1	0.42	LDR655312T-330W
47	±20	100	1.38	0.34	LDR655312T-470W

* Rated current: Value obtained when self-temperature has risen to 40°C.

• Test equipment Inductance: YHP 4284 LDR METER, or equivalent (Test frequency: 100kHz/20mV)
Rdc: DIGITAL MILLIOHM METER VP-2941A MATSUSHITA, or equivalent

TYPICAL ELECTRICAL CHARACTERISTICS

INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS

