

SMD Inductors(Coils)

For Power Line(Wound, Magnetic Shielded)

Conformity to RoHS Directive

CPL Series CPL2510

FEATURES

- It delivers low Rdc with high Idc.
- It is lead-free compatible.

The product contains no lead whatsoever.
It is able to withstand high temperature reflows (260°C during the peak) used in lead-free soldering.

APPLICATIONS

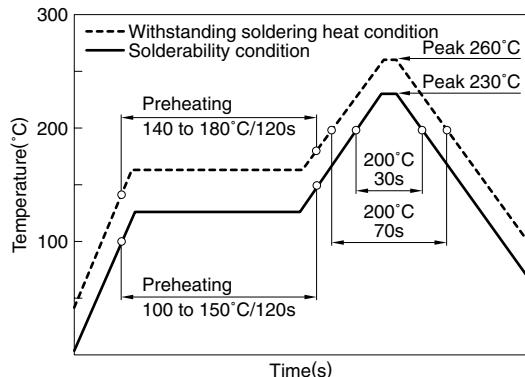
Portable audio visual devices (DSCs, DVCs, etc.)
Mobile communication devices (cellular phones, etc.)
Information devices (PCs, etc.)

SPECIFICATIONS

Operating temperature range	-40 to +105°C [Including self-temperature rise]
Storage temperature range	-40 to +105°C

RECOMMENDED SOLDERING CONDITIONS

REFLOW SOLDERING



PRODUCT IDENTIFICATION

CPL 2510 T 1R0 M
(1) (2) (3) (4) (5)

(1) Series name

(2) Dimensions

2510 2.5×1.5×1.0mm

(3) Packaging style

T Taping

(4) Inductance

1R0 1μH

(5) Inductance tolerance

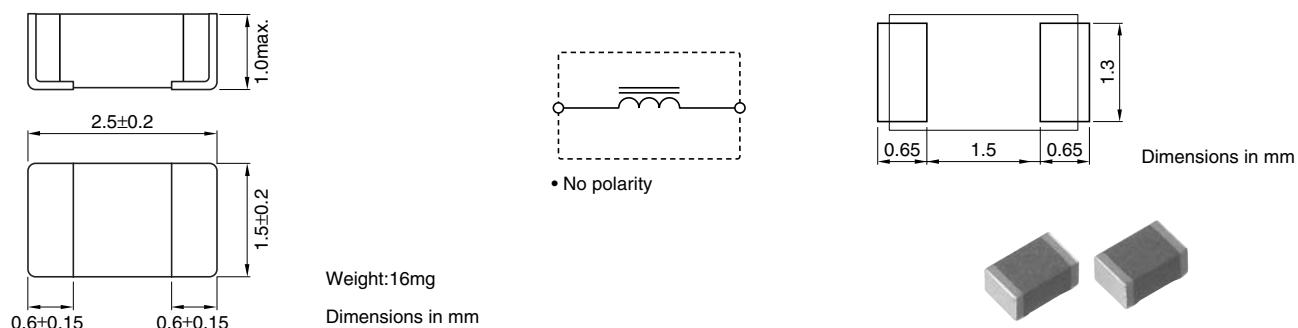
M ±20%

PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	2000 pieces/reel

- Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.
- Please contact our Sales office when your application are considered the following:
The device's failure or malfunction may directly endanger human life (e.g. application for automobile/aircraft/medical/nuclear power devices, etc.)
- All specifications are subject to change without notice.

SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM/RECOMMENDED PC BOARD PATTERN



ELECTRICAL CHARACTERISTICS

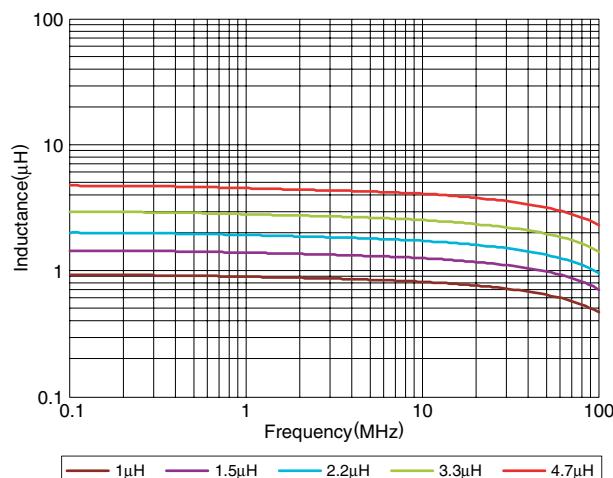
Inductance (μ H)	Inductance tolerance (%)	DC resistance (Ω) \pm 30%	Rated current ^{*1} (mA)max.	Rated current ^{*2} (mA)max.	Part No.
1	\pm 20	0.09	1200	1200	CPL2510T1R0M
1.5	\pm 20	0.12	1000	1000	CPL2510T1R5M
2.2	\pm 20	0.135	800	800	CPL2510T2R2M
3.3	\pm 20	0.27	700	700	CPL2510T3R3M
4.7	\pm 20	0.38	650	650	CPL2510T4R7M

^{*1} Rated current based on inductance variation: Current when inductance decreases by 30% of the initial value due to direct current superimposed characteristics

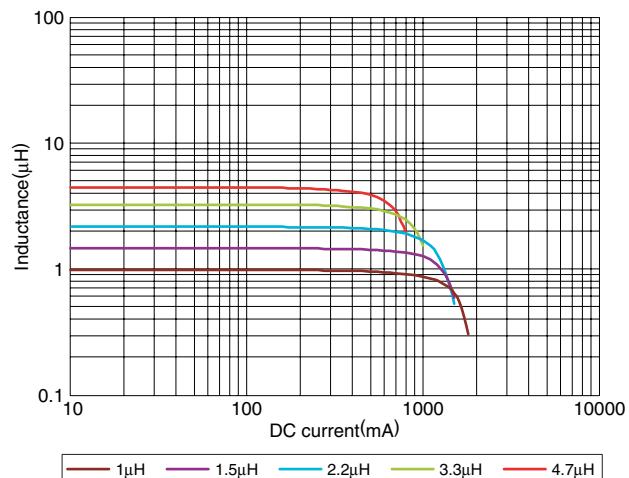
^{*2} Rated current based on increasing product temperature: Current when temperature of the product reaches +40°C

TYPICAL ELECTRICAL CHARACTERISTICS

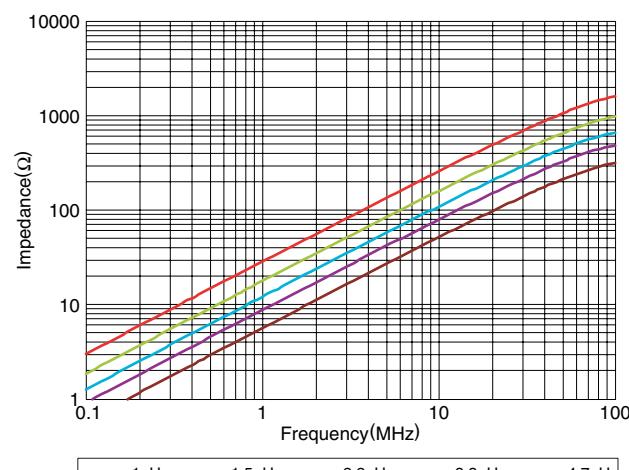
INDUCTANCE vs. FREQUENCY CHARACTERISTICS



INDUCTANCE vs. DC SUPERPOSITION CHARACTERISTICS



IMPEDANCE vs. FREQUENCY CHARACTERISTICS



DC SUPERPOSITION vs. INDUCTANCE DECREASING RATE

