



**THE DATASHEET OF
CPL2512T1R0M**



SMD Inductors(Coils) For Power Line(Wound, Magnetic Shielded)

Conformity to RoHS Directive

CPL Series CPL2512

FEATURES

- It delivers low Rdc with high I_{dc}.
- 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

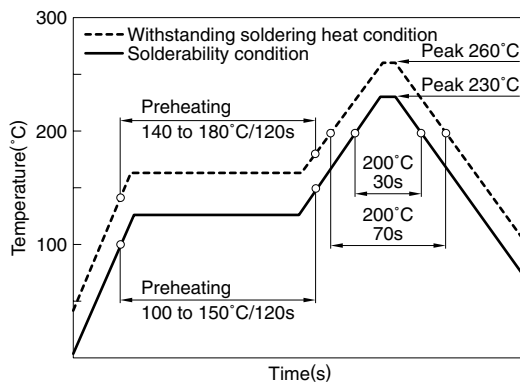
Portable audio visual devices (DSCs, DVCs, etc.)
Mobile communication devices (cellular phones, etc.)
Information devices (PCs, etc.)

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	2512	T	100	M
(1)	(2)	(3)	(4)	(5)

(1) Series name

(2) Dimensions

2512	2.5×1.5×1.2mm
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(3) Packaging style

T	Taping
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(4) Inductance

1R0	1μH
100	10μH

(5) Inductance tolerance

M	±20%
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PACKAGING STYLE AND QUANTITIES

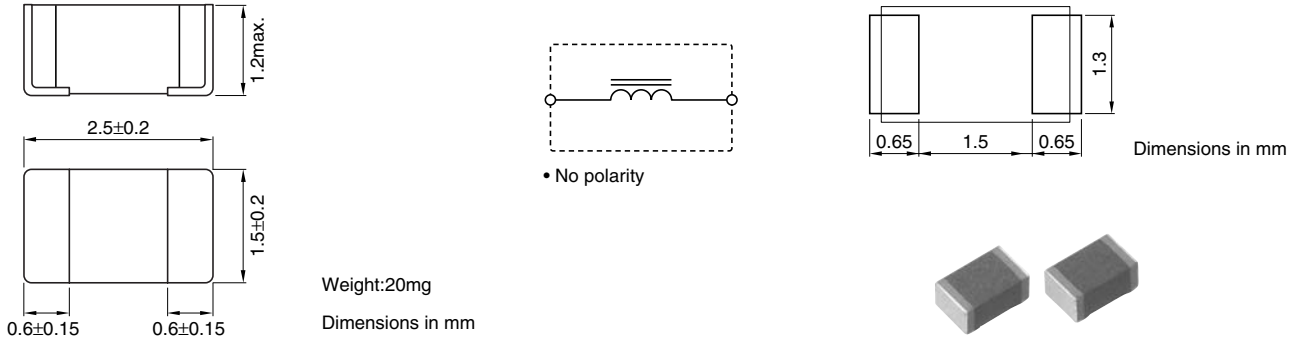
Packaging style	Quantity
Taping	2000 pieces/reel

• 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

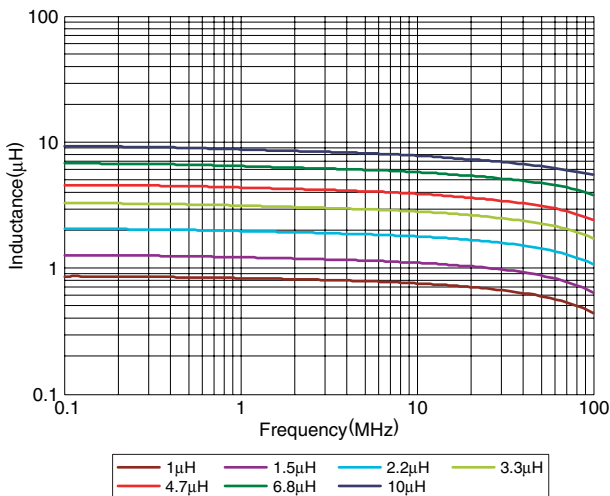
Inductance (μH)	Inductance tolerance (%)	DC resistance (Ω)±30%	Rated current*1 (mA)max.	Rated current*2 (mA)max.	Part No.
1	±20	0.09	1500	1300	CPL2512T1R0M
1.5	±20	0.12	1200	1000	CPL2512T1R5M
2.2	±20	0.135	900	900	CPL2512T2R2M
3.3	±20	0.24	730	730	CPL2512T3R3M
4.7	±20	0.36	650	650	CPL2512T4R7M
6.8	±20	0.7	450	450	CPL2512T6R8M
10	±20	0.9	300	300	CPL2512T100M

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

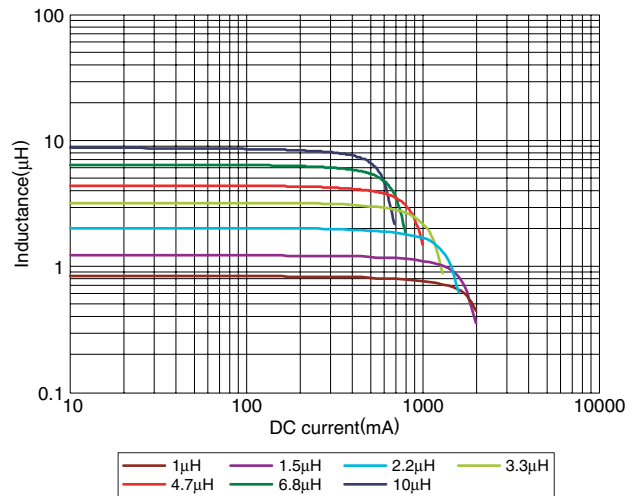
*2 Rated current based on increasing product temperature: Current when temperature of the product reaches +40°C

TYPICAL ELECTRICAL CHARACTERISTICS

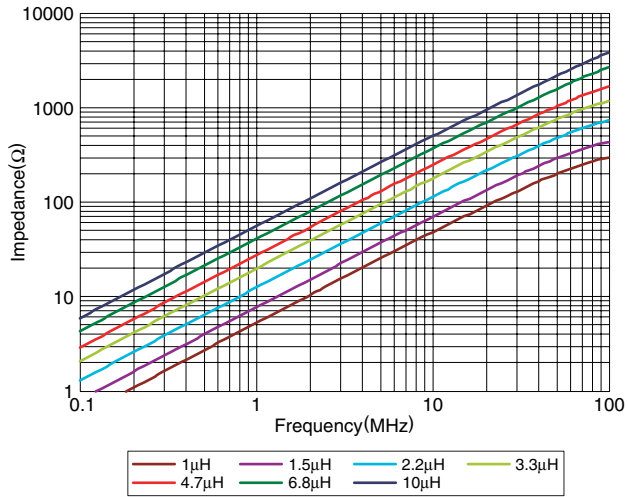
INDUCTANCE vs. FREQUENCY CHARACTERISTICS



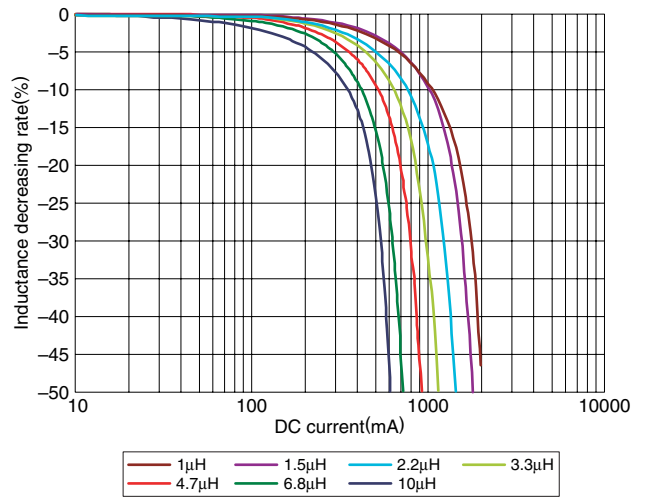
INDUCTANCE vs. DC SUPERPOSITION CHARACTERISTICS



TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS





DC SUPERPOSITION vs. INDUCTANCE DECREASING RATE



Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

-  [View CPL2512T1R0M on WIN SOURCE](#)
-  [TDK Corporation Information](#)

Optimize Your Supply Chain with WIN SOURCE Solutions

-  Global Sourcing Solution
-  Obsolete Management
-  Cost Control Management
-  Shortage Management
-  Alternative Solution
-  Excess Inventory Management