

## Excellent Integrated System Limited

Stocking Distributor

Click to view price, real time Inventory, Delivery & Lifecycle Information:

[TDK Corporation](#)  
[CPL2510T1R0M](#)

For any questions, you can email us directly:

[sales@integrated-circuit.com](mailto:sales@integrated-circuit.com)

# 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

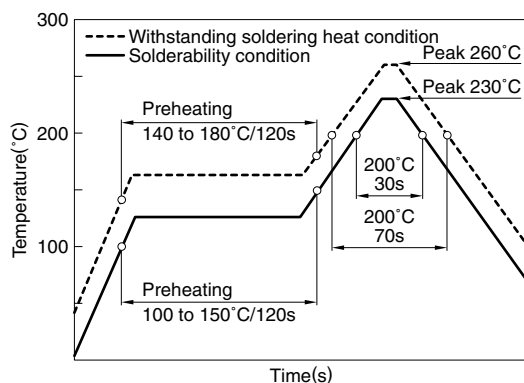
Portable audio visual devices (DSCs, DVCs, etc.)  
 Mobile communication devices (cellular phones, etc.)  
 Information devices (PCs, etc.)

### 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)

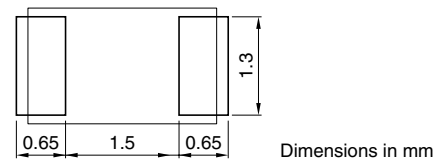
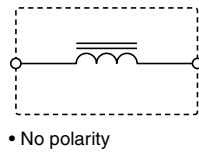
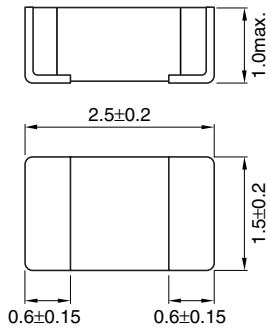
- (1) Series name  
2510
- (2) Dimensions  
2.5×1.5×1.0mm
- (3) Packaging style  
T Taping
- (4) Inductance  
1R0 1μH
- (5) Inductance tolerance  
M ±20%

### PACKAGING STYLE AND QUANTITIES

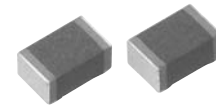
Packaging style	Quantity
Taping	2000 pieces/reel

- 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.)

**SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM/RECOMMENDED PC BOARD PATTERN**



Weight:16mg  
Dimensions in mm



**ELECTRICAL CHARACTERISTICS**

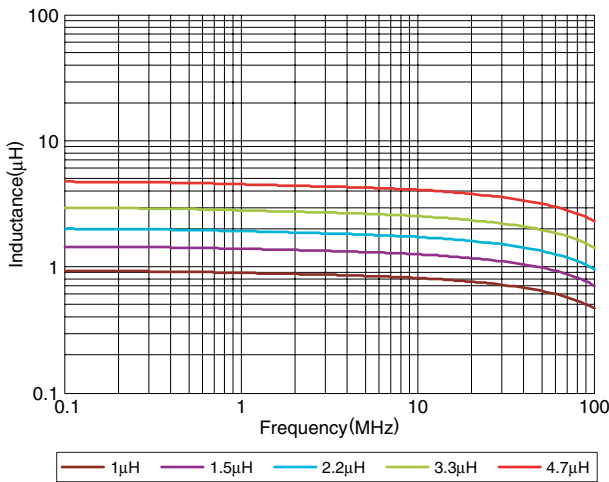
Inductance (μH)	Inductance tolerance (%)	DC resistance (Ω)±30%	Rated current*1 (mA)max.	Rated current*2 (mA)max.	Part No.
1	±20	0.09	1200	1200	CPL2510T1R0M
1.5	±20	0.12	1000	1000	CPL2510T1R5M
2.2	±20	0.135	800	800	CPL2510T2R2M
3.3	±20	0.27	700	700	CPL2510T3R3M
4.7	±20	0.38	650	650	CPL2510T4R7M

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

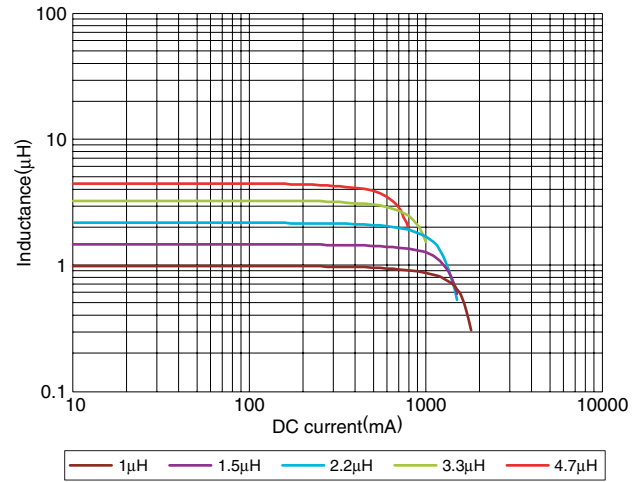
\*2 Rated current based on increasing product temperature: Current when temperature of the product reaches +40°C

**TYPICAL ELECTRICAL CHARACTERISTICS**

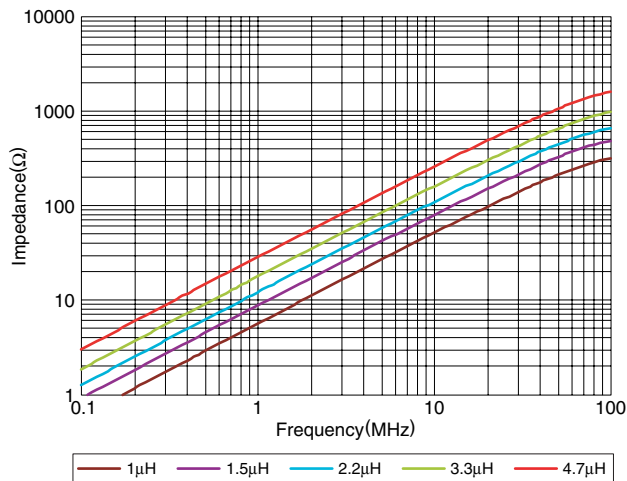
**INDUCTANCE vs. FREQUENCY CHARACTERISTICS**



**INDUCTANCE vs. DC SUPERPOSITION CHARACTERISTICS**



**IMPEDANCE vs. FREQUENCY CHARACTERISTICS**



**DC SUPERPOSITION vs. INDUCTANCE DECREASING RATE**

