SAMSUNG ELECTRO-MECHANICS

Metal Composite Power Inductor (Thin Film)

Specification Sheet

RoHS+Halogen Compliant ecoparts

CIGT201610HMR47MNE (2016 / EIA 0806)

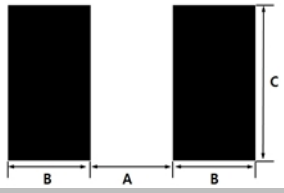
APPLICATION

Smart phones, Tablet, Wearable devices, Power converter modules, etc.

FEATURES

Small power inductor for mobile devices
Low DCR structure and high efficiency inductor for power circuits.
Monolithic structure for high reliability
Free of all RoHS-regulated substances
Halogen free

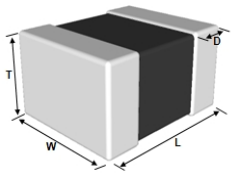
RECOMMENDED LAND PATTERN



Unit : mm

TYPE	2016
A	0.8
B	0.8
C	1.8

DIMENSION



TYPE	Dimension [mm]			
	L	W	T	D
2016	2.0±0.2	1.6±0.2	1.0 max	0.5±0.2

DESCRIPTION

Part no.	Size [inch/mm]	Thickness [mm] (max)	Inductance [uH]	Inductance tolerance (%)	DC Resistance [mΩ]		Rated DC Current ＊1 [A]		Rated DC Current ＊2 [A]	
					Max.	Typ.	Max.	Typ.	Max.	Typ.
CIGT201610HMR47MNE	0806/2016	1.0	0.47	±20	36	30	3.6	4	3.1	3.5

※Rated Current (A)＊1: DC current value when Inductance drops by 30% of nominal Inductance value *(ONLY REFERENCE)*
※Rated Current (A)＊2: DC current value when the self-generation of heat rises to 40℃ (Reference ambient temperature:25℃)
※Operating temperature range: -40 to +125°C (Including self-temperature rise)
※Test equipment: Agilent :E4991A+16092A

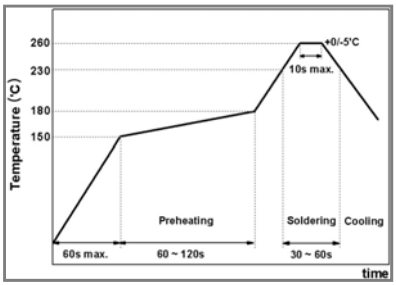
PRODUCT IDENTIFICATION

CIG	T	2016	10	HM	R47	M	N	E
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

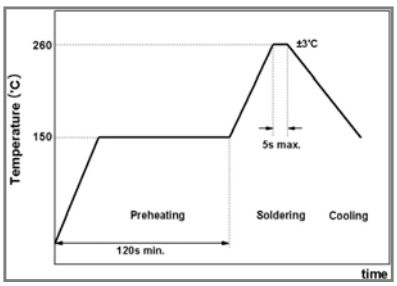
(1) Power Inductor
(2) Type (T: Metal Composite Thin Film Type)
(3) Dimensior (2016: 2.0mm ×1.6 mm)
(4) Thicknes (10: 1.0mm)
(5) Remark (Characterization Code)
(6) Inductan (R47: 0.47 uH)
(7) Toleranc (M:±20%)
(8) Internal Code
(9) Packaginç (C:paper tape, E:embossed tape)

RECOMMENDED SOLDERING CONDITION

REFLOW SOLDERING



FLOW SOLDERING



IRON SOLDERING

Temperature of Soldering Iron Tip	280℃max.
Preheating Temperature	150℃min.
Temperature Differential	ΔT≤130℃
Soldering Time	3sec max.
Wattage	50W max.

PACKAGING

Packaging Style	Quantity(pcs/reel)
Embossed Taping	3000 pcs

SAMSUNG ELECTRO-MECHANICS

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Data Sheet

RoHS+Halogen Compliant ecoparts

1. Model : CIGT201610HMR47MNE

2. Description

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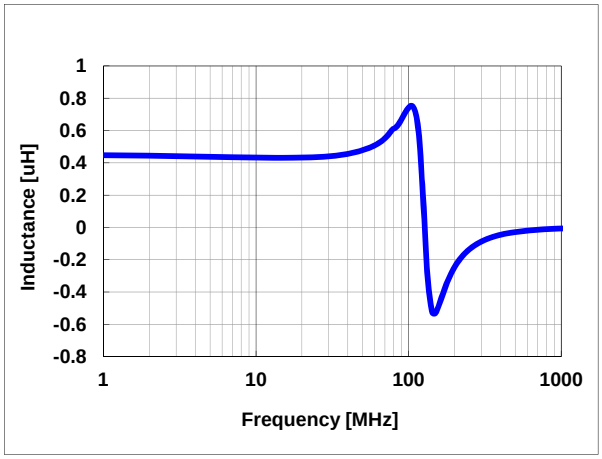
3. Characteristics data

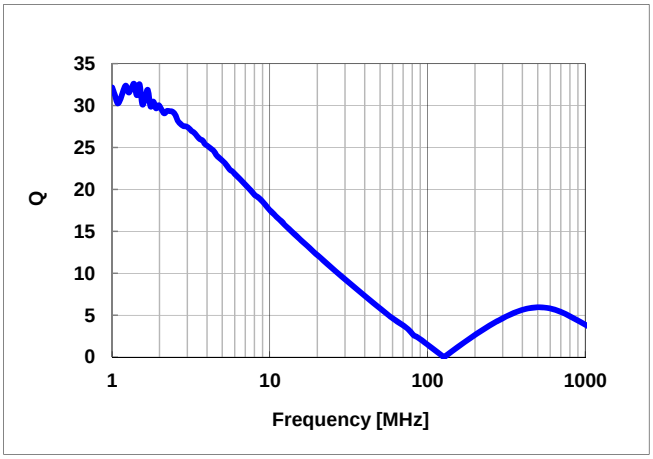
1) Frequency characteristics (Ls)

Agilent E4294A +E4991A , 1MHz to 1,000MHz

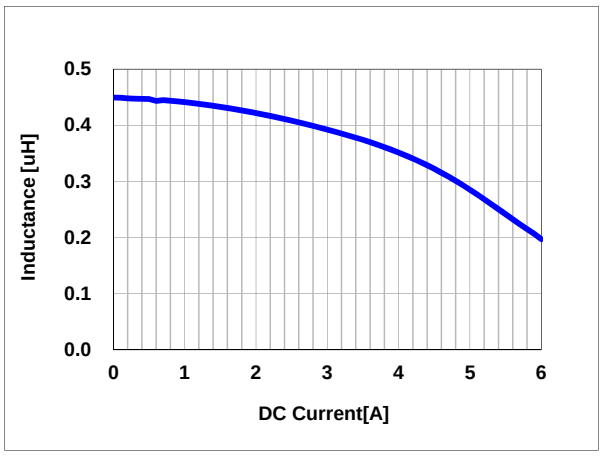


2) Frequency characteristics (Q)

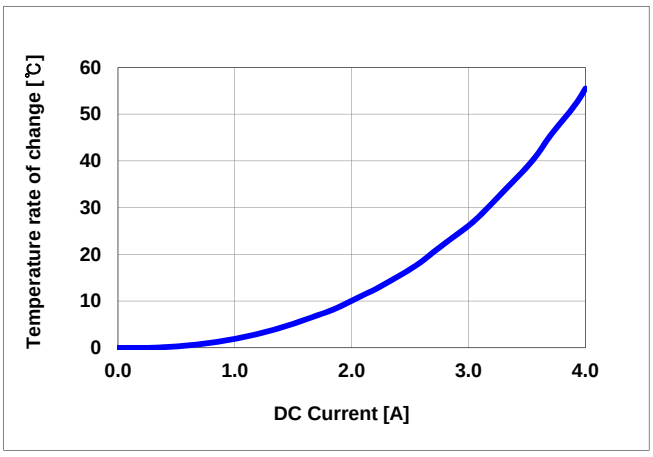
Agilent E4294A +E4991A , 1MHz to 1,000MHz



3) DC Bias characteristics (Typ.)



4)Temperature characteristics (Typ.)



Any data in this sheet are subject to change, modify or discontinue without notice
The data sheets include the typical data for design reference only. If there is any question regarding the data sheets, please contact our sales personnel or application engineers