

## Metal Wire-wound Chip Power Inductors (MCOIL™, MB series)

### MBKK1608TR47N



#### ■ Features

- Item Summary  
0.47uH±30%, 1.1A, 0603/1608 (EIA/JIS)
- Lifecycle Stage  
Mass Production
- Standard packaging quantity (minimum)  
Taping Embossed 3000pcs

#### ■ Products characteristics table

Inductance	0.47 uH ± 30 %
Case Size (EIA/JIS)	0603/1608
Rated Current (max)	1.1 A
Saturation Current (max)	1.1 A
Saturation Current (typ)	1.2 A
Temperature Rise Current (max)	1.4 A
Temperature Rise Current (typ)	1.5 A
DC Resistance (max)	104 mΩ
DC Resistance (typ)	90 mΩ
LQ Measuring Frequency	1 MHz
Operating Temp. Range	-40 to +105 °C (Including self-generated heat)
Temperature characteristic (Inductance change)	± 15 %
RoHS2 Compliance (10 subst.)	Yes
REACH Compliance (173 subst.)	Yes
Halogen Free	Yes
Soldering	Reflow

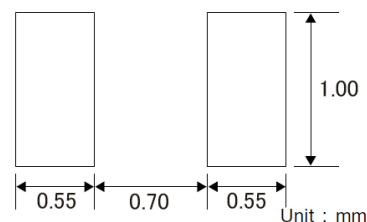
#### ■ External Dimensions

Dimension L	1.6 ± 0.2 mm
Dimension W	0.8 ± 0.2 mm
Dimension T	Max 1.0 mm
Dimension e	0.45 ± 0.15 mm

#### ■ Recommended Land Patterns

【推奨ランドパターン】  
 実装上の注意  
 ・実装状態を確認の上ご使用ください。また、ご購入の際は、本製品のハンダ付けはリフローハンダ工法に限りません。

【Recommended Land Patterns】  
 Surface Mounting  
 ・Mounting and soldering conditions should be checked beforehand.  
 ・Applicable soldering process to these products is reflow soldering only.



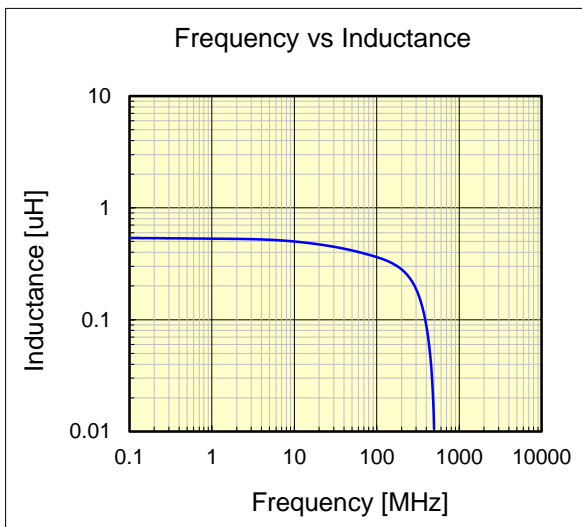
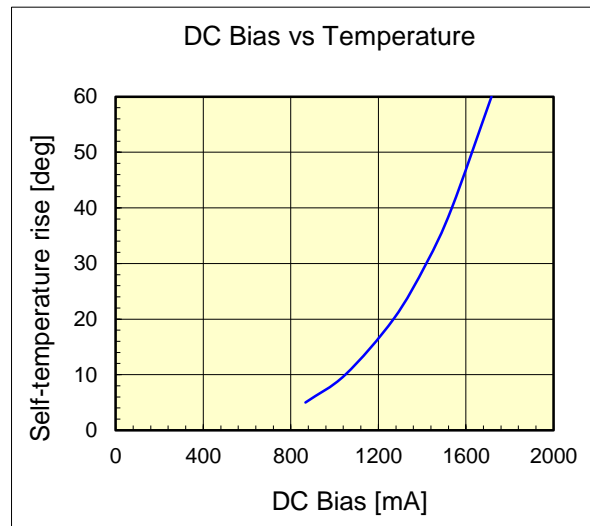
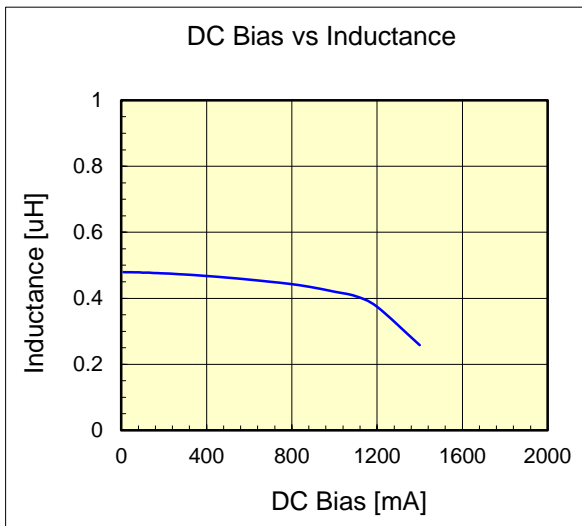
**Metal Wire-wound Chip Power Inductors (MCOIL™, MB series)**

MCOIL™  
MBKK1608TR47N



Dimension	unit : mm	unit : inch
Length :	1.6 +/- 0.2	( 0.063 +/- 0.008 )
Width :	0.8 +/- 0.2	( 0.031 +/- 0.008 )
Height :	1.0 max.	( 0.039 max. )

Inductance :	0.47	uH	( test freq at 1MHz )
DC Resistance :	0.090 / 0.104	ohm	( typ / max )
Saturation Current :	1,200 / 1,100	mA	( typ / max )
Temp. rise Current :	1,500 / 1,400	mA	( typ / max )
Saturation current typical : 30% reduction from initial L value.			
Temp rise Current typical : Temperature will rise by 40 deg C			
Maximum rated voltage : DC 25 V			



The data is reference only. Electrical characteristics vary depending on environment or measurement condition. TAIYO YUDEN reserves the right to make change to the data at any time without notice. Before making final selection, please check product specification.