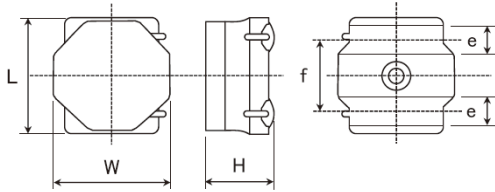


Metal Core SMD Power Inductors for Automotive / Industrial Applications (MCOIL™, MD series)

## MDWK4040TR56NMV



## ■ Features

- Item Summary  
0.56uH±30%, 6.5A, 4.0x4.0x2.0mm
- Lifecycle Stage  
Mass Production
- AEC-Q200 qualified
- Standard packaging quantity (minimum)  
Taping Embossed 700pcs

## ■ Products characteristics table

Inductance	0.56 uH ± 30 %
Case Size (mm)	4.0x4.0
Rated Current (max)	6.5 A
Saturation Current (max)	9 A ( $\Delta L=30\%$ )
Saturation Current (typ)	13 A ( $\Delta L=30\%$ )
Temperature Rise Current (max)	6.5 A ( $\Delta T=40^\circ\text{C}$ )
Temperature Rise Current (typ)	7.5 A ( $\Delta T=40^\circ\text{C}$ )
DC Resistance (max)	16 m $\Omega$
DC Resistance (typ)	14 m $\Omega$
LQ Measuring Frequency	1 MHz
Operating Temp. Range	-40 to +125 °C (Including self-generated heat)
Temperature characteristic (Inductance change)	± 10 %
RoHS2 Compliance (10 subst.)	Yes
REACH Compliance (181 subst.)	Yes
Halogen Free	Yes
Soldering	Reflow

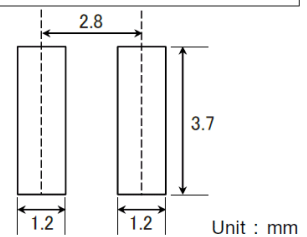
## ■ External Dimensions

Dimension L	4.0 ± 0.2 mm
Dimension W	4.0 ± 0.2 mm
Dimension H	Max 2.0 mm
Dimension e	1.1 ± 0.2 mm
Dimension f	2.5 ± 0.2 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.



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.

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