

# NEW PRODUCT INFORMATION

## Multi Layer Common Mode Filter

- RFCMF1632140M2T Series

### For USB 2.0/ IEEE 1394 Application

On USB 2.0/ IEEE 1394 interface, the frequency and strength of the noise have to be suppressed, a part called Common Mode Choke be chosen to provide the required noise attenuation, however, the higher impedance Common Mode Choke generally have a greater damaging effect and distortion on full speed and high speed signal quality.

The Common Mode Filter designed and maunfactured at Walsin Technology Corporation provide excellent noise suppression characteristics thank to high common mode impedance while with minimizing insertion loss to maintain the signal quality on the transmission line. Especially, most effective on meeting the EMI regulation of high speed USB 2.0 and IEEE 1394 interface circuit.

#### **FEATURES**

- Miniature footprint: 1.6 x 3.2 x 1.4 mm<sup>3</sup>.
- Low Differential Mode Insertion Loss maximum 0.8dB @ 240MHz
- High Common Mode attenuation minimum 9.0dB @ 140MHz ~ 1.0GHz
- Special 3D layout design to minimize phase shifting
- Reflow solderable SMD Devices

#### **ELECTRICAL CHARACTERISTICS**

Item	Specification		
Common Mode Attenuation	Min. 9.0dB @ 140MHz ~ 1GHz		
Differential Mode Insertion Loss	Max. 0.8 dB @ 240MHz		
DC Resistance	Max. 2.5 Ω		
Rated Current	300 mA		
Characteristic Impedance	90 Ω		
Operating Temperature	- 40 °C ~ +85 °C		

#### **APPLICATIONS**

- USB 2.0/ IEEE 1394 high speed data transmission
- PC Related, DSC, Scanner, Data Storage, CD ROM W/R, Printer

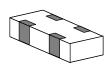
#### **DIMENSION**

Figure	Symbol	Dimension
b T	L	1.60 ± 0.20 mm
	W	3.20 ± 0.20 mm
	Т	1.40 ± 0.20 mm
	Р	1.10 ± 0.20 mm
	а	0.60 ± 0.20 mm
	b	0.50 ± 0.20 mm

Patent Pending



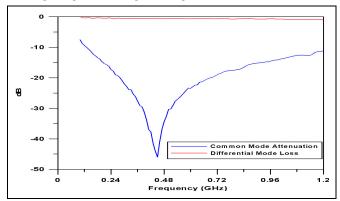
#### **CONSTRUCTION and SCHEMATIC**





Outline and Schematic of USB 2.0/ IEEE 1394 Common Mode Filter

#### **ELECTRICAL PERFORMANCE**



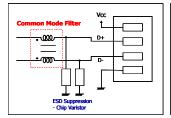
#### **APPLICATION CIRCUIT**

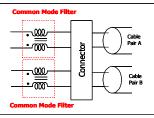
(1). USB 2.0

(2). IEEE 1394

#### **CONTACT INFORMATION**

For more information, please contact with Walsin Technology Corporation





Tel : 886-3-475-8711 Fax No. : 886-3-475-5197

E mail : info@passivecomponent.com

Web : http://www.passivecomponent.com

Specification subject to change without prior notice.