

# COMMON MODE CHOKE FOR IEEE 1394 APPLICATIONS

## **DESCRIPTION**

The B5W is a dual wound common mode choke ideal for common mode noise attenuation in twisted pair cable interfaces as well as IEEE 1394 applications. An excellent impedance balance between two sets of twisted pairs is achieved by winding across a single core. One B5W common mode choke coil per interface port is possible with this dual winding configuration.



## **FEATURES**

■ Low profile: 3.4 mm (Max.)

 $\blacksquare$  Common mode impedance of 220  $\Omega$ 

at 100 MHz (typical)

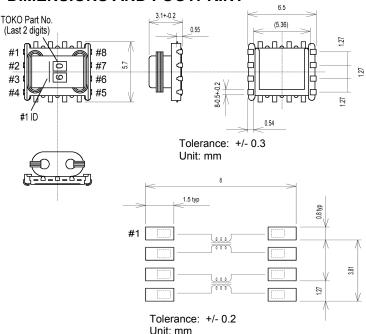
Operating temperature: -10°C to +60°C

■ Storage temperature: -25°C to +70°C

Suitable for reflow soldering

■ Packaged on 2,000 piece reels

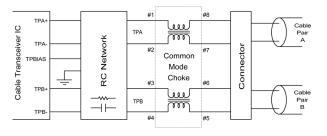
## DIMENSIONS AND FOOTPRINT



Insertion Loss		I <sub>DC</sub>	R <sub>DC</sub>	Withstand Voltage
50 MHz	2.8 dB +/- 2.0 dB	0.65 A	0.3 Ω	100 VDC
100 MHz	7.3 dB +/- 2.5 dB	(Max.)	(Max.)	
300 MHz	12.0 dB +/- 3.0 dB			
500 MHz	14.0 dB +/- 3.0 dB			
	50 MHz 100 MHz 300 MHz	50 MHz 2.8 dB +/- 2.0 dB 100 MHz 7.3 dB +/- 2.5 dB 300 MHz 12.0 dB +/- 3.0 dB	50 MHz 2.8 dB +/- 2.0 dB 0.65 A 100 MHz 7.3 dB +/- 2.5 dB (Max.) 300 MHz 12.0 dB +/- 3.0 dB	50 MHz 2.8 dB +/- 2.0 dB 0.65 A 100 MHz 7.3 dB +/- 2.5 dB (Max.) (Max.)

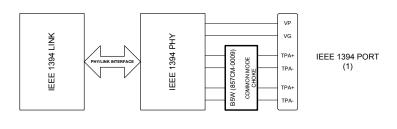
## **APPLICATIONS**

# **Twisted Pair Cable Interface**



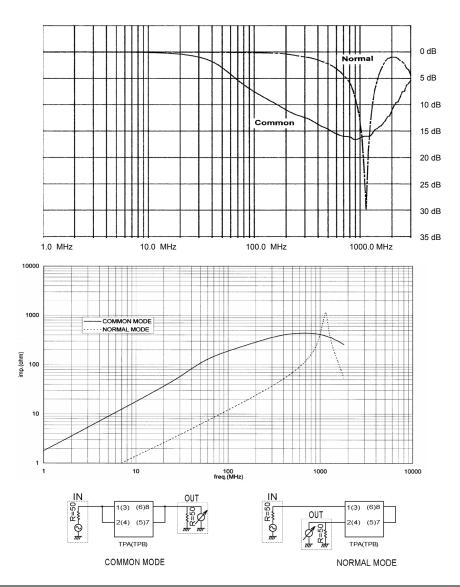
B5W (857CM-0009)

# IEEE 1394 Port



January 1999 1

# ATTENUATION AND IMPEDANCE CHARACTERISTICS OF 857CM-0009



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