

Common Mode Choke

Description

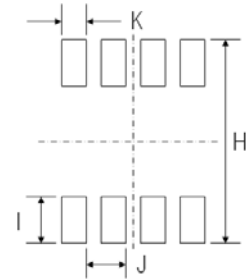
The MSC is a dual wound common mode choke ideal for common mode noise attenuation in twisted pair cable interfaces as well as IEEE1394 applications.

An excellent impedance balance between two sets of twisted pairs is achieved by winding across a single core.

One MSC-A common mode choke coil per interface port is possible with this dual winding configuration.

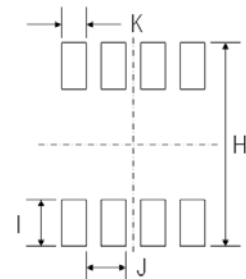
MSC-5035S Directions

- ◎Miniature footprint : 5.00×3.50mm
- ◎Low profile : 2.50mm (max)
- ◎Common mode impedance of 90~600Ω at 100MHz (typical)
- ◎Operating temperature : -25°C to +85°C
- ◎Suitable for reflow soldering.



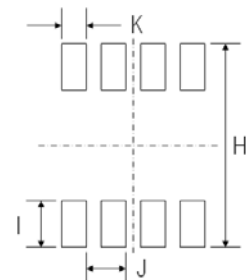
MSC-6558S Directions

- ◎Miniature footprint : 6.40×5.85mm
- ◎Low profile : 3.50mm (max)
- ◎Common mode impedance of 90~600Ω at 100MHz (typical)
- ◎Operating temperature : -30°C to +85°C
- ◎Suitable for reflow soldering.



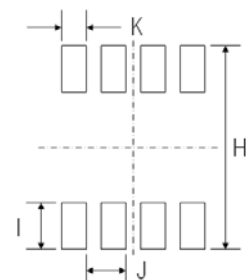
MSC-5050A Directions

- ◎Miniature footprint : 5.00×5.00mm
- ◎Low profile : 2.50mm (max)
- ◎Common mode impedance of 90~600Ω at 100MHz (typical)
- ◎Operating temperature : -25°C to +85°C
- ◎Suitable for reflow soldering.



MSC-6558A Directions

- ◎Miniature footprint : 6.50×5.70mm
- ◎Low profile : 3.50mm (max)
- ◎Common mode impedance of 90~600Ω at 100MHz (typical)
- ◎Operating temperature : -25°C to +75°C
- ◎Suitable for reflow soldering.



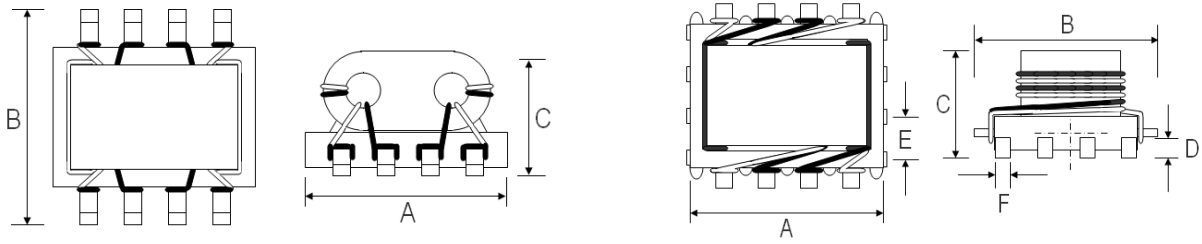


Fig-1

Fig-2

Unit : mm

Size	A	B	C	D	E	F	G	H	I	J	Fig
MSC-5035S	3.50±0.5	5.00±0.5	2.50 max	-	-	-	6.00	1.50	0.80	0.60	1
MSC-6558S	5.85±0.5	6.40±0.5	3.10 ±0.5	-	-	-	8.00	2.00	1.27	0.80	1
MSC-5050A	5.00 max	5.00±0.5	2.50 max	0.45±0.2	0.80±0.1	0.40 ±0.1	6.00	1.50	0.80	0.60	2
MSC-6558A	6.50±0.5	5.70±0.5	3.10 ±0.5	0.55±0.2	1.27±0.1	0.50±0.1	8.00	1.50	1.27	0.80	2

Part Number Code

MSB - 63 - 90 0  
 1 2 3 4

- 1 - Series Name
- 2 - Size Code : the first two digitals : length(mm), the last two digitals : width(mm)
- 3 - Impedance( $\Omega$ )  $\pm 25\%$  { (ex : 600=60 $\Omega$  ; 601=600 $\Omega$ )
- 4 - Fixed Decimal Point

Specification

Part No.	Impedance ( $\Omega$ ) min		IDC(Max)	RDC(Max)	Withstand Voltage
	100MHz	300MHz			
MSC-5035S-900	90	140	0.5A	90m $\Omega$	100VDC
MSC-5035S-201	200	400	0.5A	90m $\Omega$	

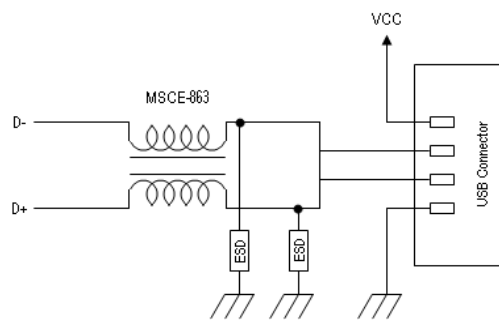
Part No.	Impedance ( $\Omega$ ) min		IDC(Max)	RDC(Max)	Withstand Voltage
	100MHz	300MHz			
MSC-6558S-900	90	180	0.5A	90m $\Omega$	100VDC
MSC-6558S-201	200	300	0.5A	90m $\Omega$	
MSC-6558S-501	500	320	0.5A	120m $\Omega$	

Part No.	Impedance ( $\Omega$ ) min		IDC(Max)	RDC(Max)	Withstand Voltage
	100MHz	300MHz			
MSC-5050A-201	200	400	0.5A	90m $\Omega$	100VDC

Part No.	Impedance ( $\Omega$ ) min		IDC(Max)	RDC(Max)	Withstand Voltage
	100MHz	300MHz			
MSC-6558A-201	200	300	0.5A	90m $\Omega$	100VDC
MSC-6558A-501	500	320	0.5A	120m $\Omega$	

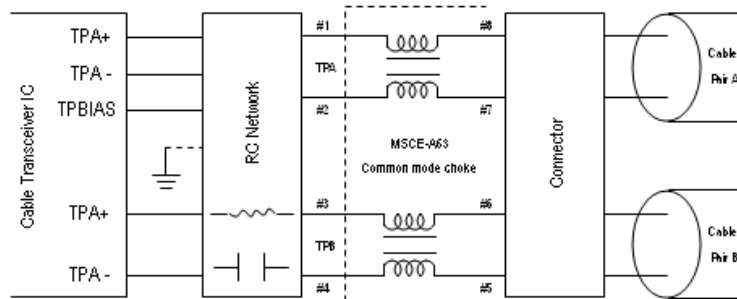
Applications examples (MSC-5035S、MSC-6558S)

USB2.0



Applications examples (MSC-5050A、MSC-6558A)

Twisted Pair Cable Interface



Applications examples

IEEE1394 Port

