



LC-2C1-223KC  
EMI SUPPRESSION FILTER

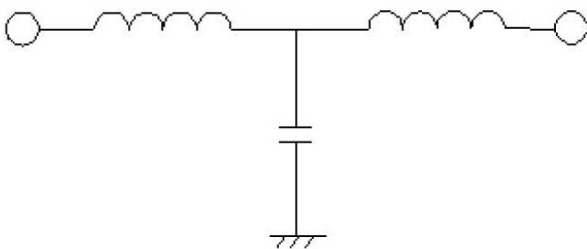
**产品规格** Product Guide

- 型号(Type): LC-2C1-223KC
- 电容量(Capacitance): 22000PF±10%
- 额定电压(Rated voltage): 100 VDC
- 额定电流(Rated current): 6A
- 绝缘电阻(Insulation resistance):  $R_i \geq 1 \times 10^9 \Omega$
- 温度范围(Temp range): -55°C~125°C
- 插入损耗(Insertion loss):

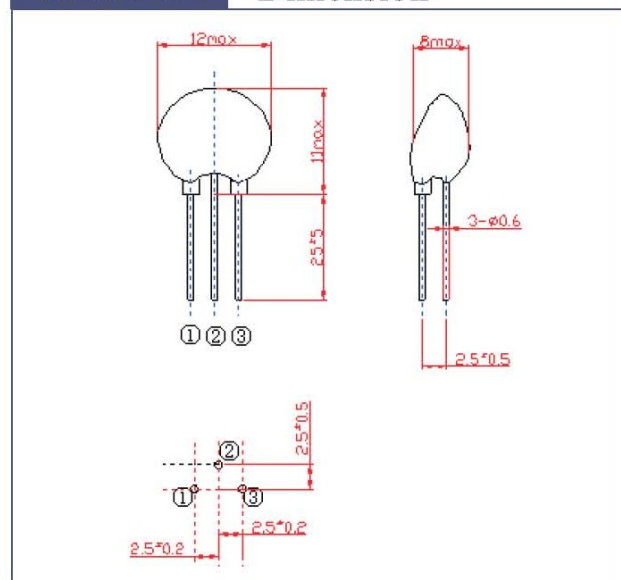
频率 Frequency (MHz)	0.1	0.5	1	10	100
最小插入 Min. insertion (dB)	20	30	45	25	15

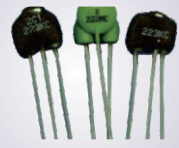
温度范围 (Temp. range) : -55~125°C

- 质量等级(Quality grade): CAST C
- 执行标准(Execution standard)
- 射频干扰滤波器总规范(General specification for RF interference filters)
- 电路原理(Circuit principle)



**外形尺寸** Dimension





**EMI FILTER**  
EMI滤波器



**EMI FILTER**  
EMI滤波器



LC-2C1-105KC  
EMI SUPPRESSION FILTER

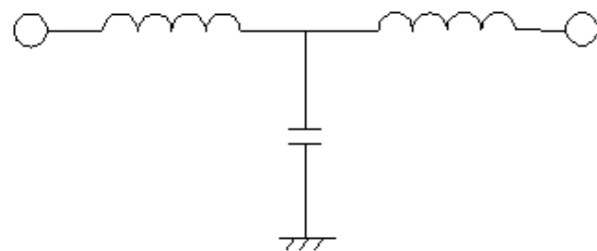
**产品规格** Product Guide

型号(Type):LC-2C1-105KC  
电容量(Capacitance):1000000PF±10%  
额定电压(Rated voltage):30VDC  
额定电流(Rated current):10A  
绝缘电阻(Insulation resistance): $R_i \geq 1 \times 10^9 \Omega$   
温度范围(Temp range):-55°C~125°C  
插入损耗(Insertion loss):

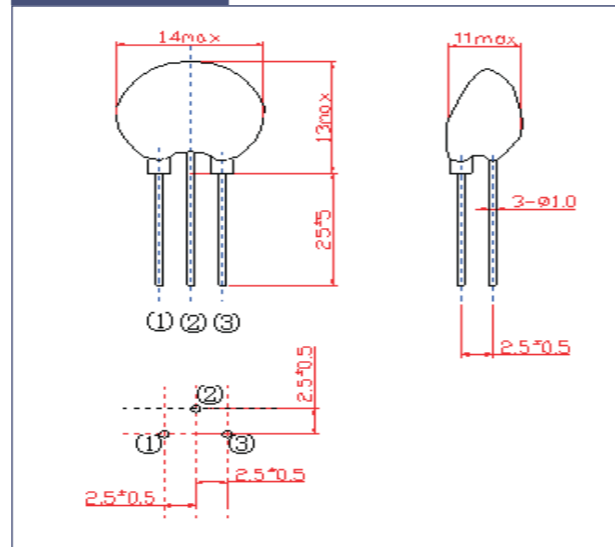
频率 Frequency (MHz)	1	15	150	300
最小插入 Min. insertion (dB)	20	30	45	25

温度范围 (Temp. range) : -55~125°C

质量等级(Quality grade) 军品(Military products): CAST C  
执行标准(Execution standard)  
射频干扰滤波器总规范(General specification for RF interference filters)  
电路原理(Circuit principle)



**外形尺寸** Dimension



LC series filters and LT series ceramic filters are also offered. Please contact us for details.

HY28 SERIES EMI FILTER MODULES

**Features**

- Insertion loss: 60 dB at 500 KHz
- Operating temperature: -55° ~ +125°C
- Working voltage: 28 V
- Working voltage range: -0.5 to 50 V
- Transient overload voltage: 0 to 80 V for 1 second
- Compliant standard :

GJB548B-2005 Test methods and procedures for microelectronic device  
GJB2438A-2002 General specification for hybrid integrated circuits

**Description**

EMI filter Modules are specifically designed to reduce the reflected input ripple current of high frequency DC-DC converters. It minimizes electromagnetic interference for Interpoint's space applications converters. These filters are intended for use in 28V applications which must meet GJB2438A-2002 and GJB548B-2005. One filter can be used with multiple converters up to the rated throughput current of the filter.

**Input Ripple and EMI**

Switching DC-DC converters naturally generate two noise components on the power input line: differential noise and common mode noise. Input ripple current refers to both of these components. Differential noise occurs between the positive input and input common. Most DC-DC converters have an input filter that reduces differential noise which is sufficient for many applications. Common mode noise occurs across stray capacitance between the converter's power train components and the baseplate (bottom of the package) of converter.

**Electrical Characteristics**

-55° to +125°C Tc, Vin=28V unless otherwise specified

Type	HY28-MH-2JF				HY28-461A-3.5B1F			HY28-461D-7BF			HY28-40A-6BF			Unit
	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX		
INPUT VOLTAGE	CONTINUOUS	-0.5	28	50	-0.5	28	50	-0.5	28	50	-0.5	28	50	VDC
	TRANSIENT, 1 sec	-0.5	-	80	-0.5	-	80	-0.5	-	80	-0.5	-	80	V
NOISE REJECTION	500 kHz	50	60	-	50	60	-	50	60	-	50	60	-	dB
	1 MHz	50	60	-	50	60	-	50	60	-	50	60	-	dB
DC RESISTANCE (RDC)1	25°C	-	0.030	0.040	-	0.040	0.045	-	0.035	0.045	-	0.020	0.030	ohms
	TC = -55 AND +125 °C	-	0.040	0.050	-	0.045	0.050	-	0.045	0.055	-	0.030	0.040	ohms
CAPACITANCE	ANY PIN TO CASE	20	25	30	1	2	3	10	20	30	10	20	30	nF
OUTPUT VOLTAGE 3	STEADY STATE	VOUT = VIN - IIN (RDC)			VOUT = VIN - IIN (RDC)			VOUT = VIN - IIN (RDC)			VOUT = VIN - IIN (RDC)			VDC
OUTPUT CURRENT	STEADY STATE	-	-	2	-	-	3.5	-	-	7	-	-	10	A
POWER DISSIPATION 4	TC = 25°C	-	0.120	0.160	-	0.490	0.563	-	1.715	2.205	-	2.000	3.000	W
	TC = 125°C	-	0.160	0.200	-	0.563	0.625	-	2.205	2.695	-	3.000	4.000	W
Size	Non-flanged	37.08 x 28.70 x 8.38			53.34 x 28.32 x 10.16			69.09 x 34.29 x 12.60			69.09 x 34.29 x 12.60			mm³

Note : 1. Guaranteed by design, not tested.  
2. 0.5 ohm impedance.  
3. Typical applications result in VOUT within 3% of VIN.  
4. At Maximum current