CSA70系列

通信线路用

CSA70 SERIES

For Communication Lines

CSA70系列是贴片式通信线路用浪涌吸收器。采用本公司历经多年发展起来的微隙方式，实现了优异的浪涌响应特性和0.6pF以下的低静电容量。本产品结构小巧，浪涌耐量达1,500A(8/20μsec.)。其中400V的产品符合ADSL POTS*分路器用规格：ITU-T(国际电信联盟-试验规格)K.20或K.21的Basic Test Condition(基本试验条件)。

CSA 70 Series is a chip type surge absorber for protecting communication networks. Through our long history of developing microgap products, we have been able to realize a product with excellent surge protection characteristics and low capacitance of less than 0.6pF. Even with its small package design, it is easily able to withstand 1,500A (8/20μsec.) surges. Meets the standard for ADSL POTS* splitters, in accordance with ITU-T (International Telecommunication Union test standard) K.20 and K.21 Basic Test Conditions.

*POTS : Plain Old Telephone Service

■特点

- ●使用4032形状的小型芯片，适合自动插装、流动及回流焊接。
- ●采用微隙方式，浪涌响应性优异。
- ●0.6pF以下的低静电容量，不会阻碍兆位级的高速通信信号。
- ●100MΩ以上的高绝缘阻抗特性。
- ●端子电极采用镀锡，是完全无铅产品。
- ●已获得UL497B认证。

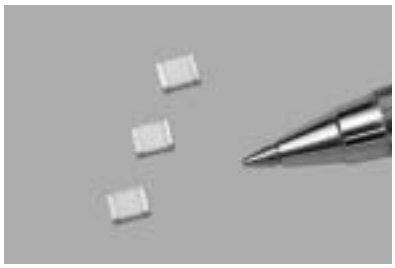
■Features

- ●Standard small chip package (EIA 1612, height 2.3+/-0.2mm), for use with standard place and reflow solder equipment.
- ●Superior surge response characteristics from microgap technology.
- ●Low capacitance of less than 0.6pF means no appreciable attenuation on high-speed, megabit class communication signals.
- ●High insulation resistance of over 100MΩ.
- ●Use tin plated electrodes and are completely lead free.
- ●This series are recognized under UL497B.

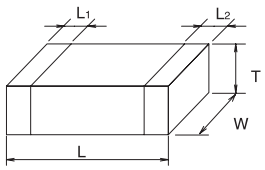
■型号构成 Part number system

CSA70 – 401 L – T

	系列名 Series
401	直流放电开始电压(Vs) DC Spark-over voltage(Vs) 前2位数字表示电压值的有效数字，第3位数字表示乘幂。The first two digits are significant, and the third is number of zeros. 例) 401表示 40×10^1=400v Ex)401 means: 40×10^1=400v
L	直流放电开始电压容许偏差 DC Spark-over voltage tolerance L ±15% M ±20%
T	编带形式 Taping form B 散袋装 Bulk T 带装 Taping

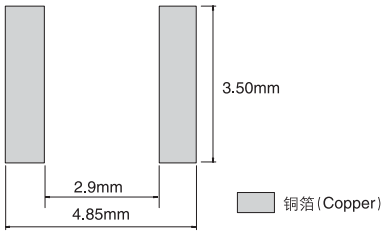


■形状・尺寸(mm) Dimensions (mm)



L 4.0±0.2
W 3.2±0.2
T 2.3±0.2
L1.L2 0.4±0.2 单位：(mm)

■推荐焊盘布局 Recommended Land Pattern



■特性 Characteristics

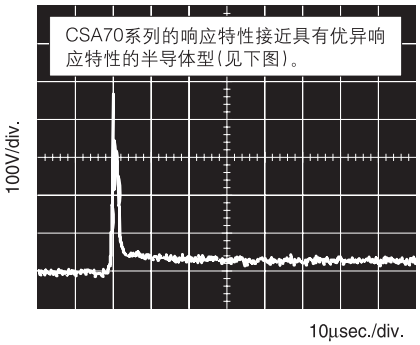
系列名 Series	型 号 Part number	直流放电开始电压 DC Spark-over voltage Vs	绝缘阻抗 Insulation resistance IR	静电容量 Electrostatic capacitance 1kHz-6V max. C	浪涌耐量 Surge current capacity	浪涌寿命 Surge life test	UL规格认证产品 UL recognized UL 497B 1)
CSA70	CSA70-301L	300V±15%	100MΩmin.	0.6pF max.	8/20μsec-1500A	8/20μsec-50A 300 times	○
	CSA70-401L	400V±15%					○
	CSA70-601M	600V±20%					○

1)：UL Standard UL 497B File No. E175280(N)

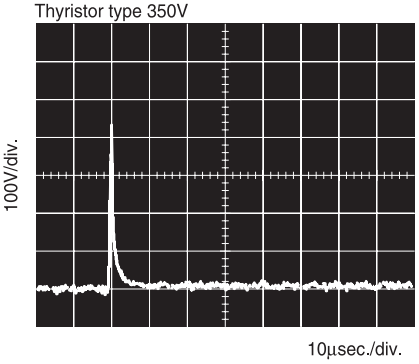
■浪涌响应特性(参考值) Surge Response Characteristics (Reference)

对10/700μsec. 4kV浪涌的响应波形
Response waveform against 10/700μsec. 4kV

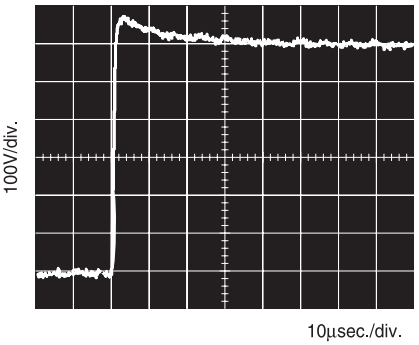
CSA70-401L



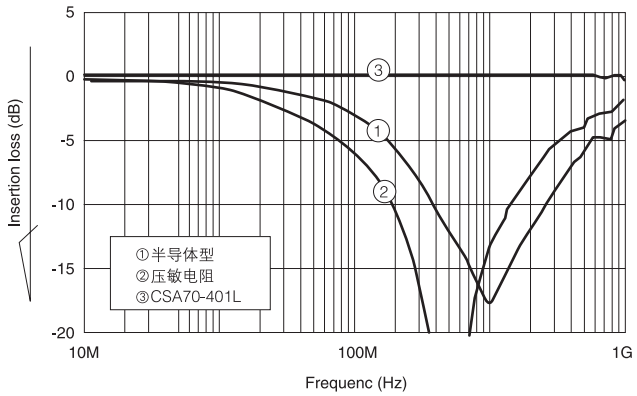
可控硅型
Thyristor type 350V



压敏电阻
Varistor 390V



■插入损失特性(参考值) Insertion loss properties (Reference)



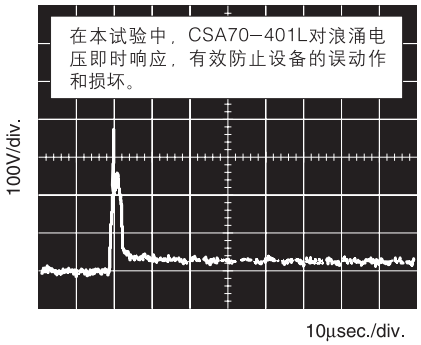
如左图所示，CSA70系列具有0.6pF以下的低静电容量，因此不会阻碍兆位级的高速通信信号。

As can be seen in the figure on the left, the CSA70 series can be used on megabit class lines without in bibiting the high-speed signals due to a low capacitance of less than 0.6pF.

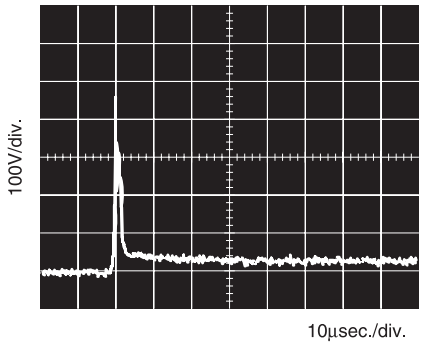
■ITU-T K.20 or K.21 Basic Test Condition for CSA70-401L (Reference)

浪涌试验：10/700μsec.1.5kV/4kV(25Ω)±5次
Surge Test

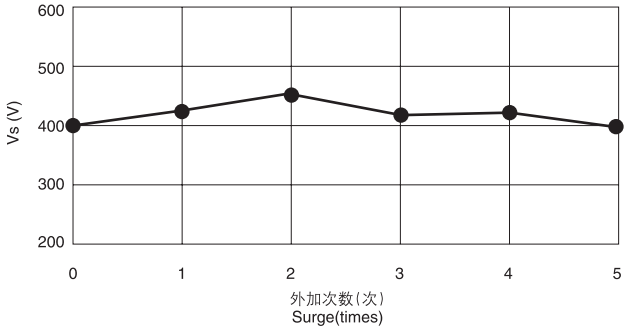
响应波形 Response waveform
10/700μsec. 1.5kV



响应波形 Response waveform
10/700μsec. 4kV



AC感应试验：AC600V(600Ω)1sec.5次
Power induction Test



如左图所示，在本试验中，CSA70—401L的放电开始电压未下降。同时，绝缘阻抗、静电容量也未变化。

As seen in the figure on the left, through out the test, the breakdown voltage never decreases, Furthermore, there is no charge in the insulation resistance or capacitance of the part.

AC交叉试验：AC230V(10～1000Ω)15min.
Power cross Test

但外加AC230V时，CSA70—401L未响应。
However, AC230V is too low for CSA70-401L to react.

如上所示，CSA70-401L符合ADSL POTS*分路器用规格：ITU—T(国际电信联盟 试验规格)K.20或K.21的Basic Test Condition(基本试验条件)。

As mentioned above, CSA70-401L correspond to ITU-T (International / Telecommunication Union Test Standard) K.20 or K.21 Basic Test Conditions for the ADSL POTS* spliter standard

■焊接条件请参见第84页。 Please refer to page 84 for soldering conditions.