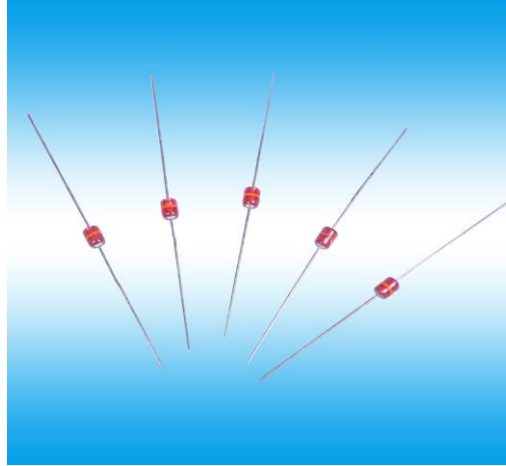


Type GS51 Series/ Surge Absorber

GS51系列/玻璃放电管



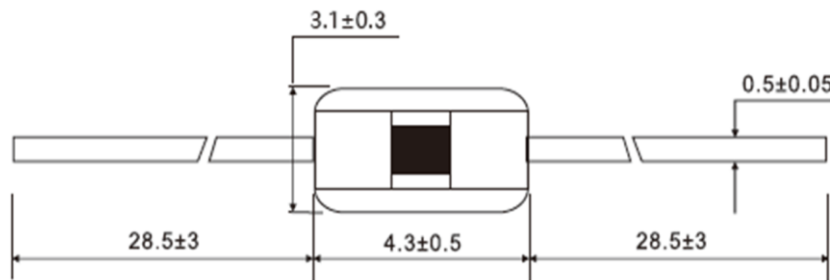
Features产品特征

- Approximately zero leaking current before clamping voltage.
箝位电压前泄漏电流近似为零。
- Less decay at on/off state.
开关时态衰减少
- High capability to withstand repeated lightning strikes.
能承受多次闪电雷击
- Low electrode capacitance ($\leq 0.5\text{pF}$) and high isolation ($\geq 100\text{M}\Omega$).
低电极电容 ($\leq 0.5\text{ pF}$) 和高隔离 ($\geq 100\text{ m}\Omega$)
- Temperature, humidity and lightness insensitive
温度、湿度和亮度不敏感
- Bilateral symmetrical
双侧对称
- Operating temperature: $-40^\circ\text{C} \sim +85^\circ\text{C}$
工作温度: $-40^\circ\text{C} \sim +85^\circ\text{C}$
- Storage temperature: $-40^\circ\text{C} \sim +125^\circ\text{C}$
储存温度: $-40^\circ\text{C} \sim +125^\circ\text{C}$
- Meets MSL level 1, per J-STD-020
符合MSL一级, 符合J-STD-020

Applications产品应用

- Power Supplies.
电源
- High frequency signal transmitters/receivers.
高频信号发射器/接收器
- Relay switching spark absorbing.
继电器开关火花吸收
- Data line pulse guarding.
数据线脉冲保护
- Electronic devices requiring UL497A and UL497B compliance
符合UL497A和UL497B标准的电子设备
- Telephone/Fax/Modem.
电话/传真/调制解调器
- Motor sparks eliminating.
电机火花消除
- Satellite antenna.
卫星天线
- Radio amplifiers.
广播功放
- Alarm systems.
报警系统
- Cathode ray tubes in Monitors/TVS.
射线管/监视器/电视

Dimensions(Unit:mm)尺寸 (单位: mm)



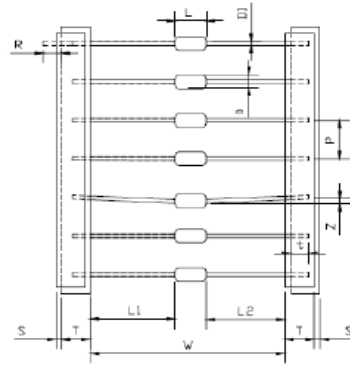
Type GS51 Series/Surface Mounted Surge Absorber

Electrical Specifications 电气特性

| Catalog Number | DC Spark-Over Voltage 100V/s Vs(V) | Impulse Spark-Over 1KV/ μs | Nom Impulse Discharge Current 10×700μs(KV) | Nom Impulse Discharge Current 8×20μs(KA) | Insulation Resistance | | Capacitance C 1MHz < 6V pF Max |
|----------------|---------------------------------------|----------------------------------|-----------------------------------------------|---------------------------------------------|-----------------------|------|--------------------------------------|
| | | | | | Min. M Ω | DC V | |
| GS51-141N | 140V±30% | 700 | 2.0 | 3.0 | 100 | 50 | 1 |
| GS51-201M | 200V±20% | 700 | 2.0 | 3.0 | 100 | 100 | 1 |
| GS51-301M | 300V±20% | 900 | 2.0 | 3.0 | 100 | 100 | 1 |
| GS51-401M | 400V±20% | 1000 | 2.0 | 3.0 | 100 | 100 | 1 |
| GS51-501M | 500V±20% | 1200 | 2.0 | 3.0 | 100 | 250 | 1 |
| GS51-601M | 600V±20% | | 2.0 | 3.0 | 100 | 250 | 1 |
| GS51-102M | 1000V±20% | | 2.0 | 3.0 | 100 | 250 | 1 |

Packaging and Type Designation 包装和型号名称

| Symbol | Dimension(mm) |
|--------|--------------------------------------|
| W | 52±1.5 |
| P | 5.0±0.5 |
| L1-L2 | 1Max |
| T | 6.0±1.0 |
| Z | 1.2Max |
| R | Terminals must not project from tape |
| t | 3.2Max |
| s | 0.8Max |
| D1 | φ0.5±0.05 |
| L | 4.8Max |



Formation of Type Designation 类型命名的形成

Example: GS51- 141 N
① ② ③④

Symbols符合表

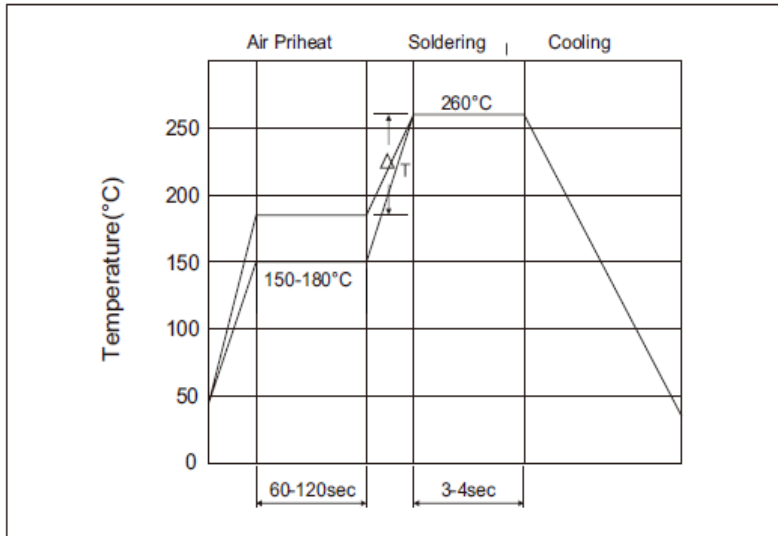
- ① GS: GLASS SURGE ABSORBER
- ② Series : GS51 GS41 GSMD DSL GSP
- ③ DC sparkover voltage marking: The first two number is significant digits, the last number is multiplier;
- ④ DC sparkover voltage tolerance: L:±15% M:±20% N:±30%

On Taping: GS51 series-2000pcs Per Reel
GS51 series -20000pcs outer box.

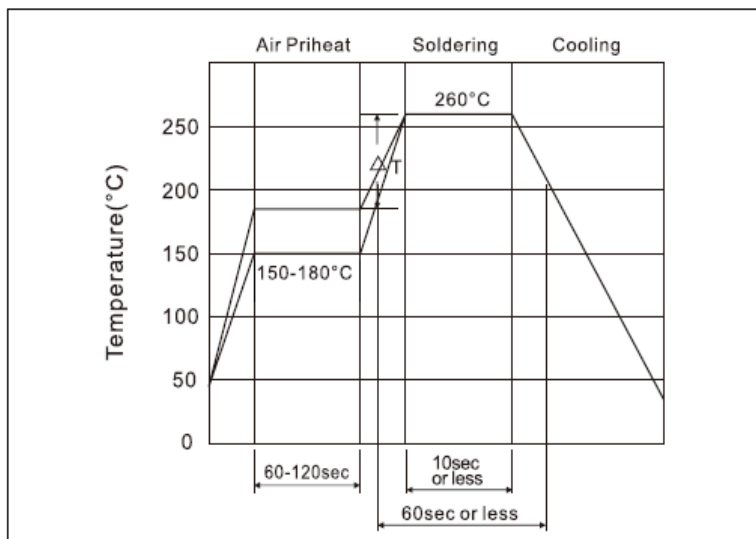
Type GS51 Series/Surface Mounted Surge Absorber

Recommended Soldering Conditions 焊接条件

Flow Soldering Conditions



Reflow Soldering Conditions



Hand Soldering

Solder iron temperature: $350 \pm 5^\circ\text{C}$.

Heating time: 3 seconds max.

- Time shown in the above figures is measured from the point when chip surface reaches temperature.
- Temperature difference in high temperature part should be within 110°C .
- After soldering, do not force cool, allow the parts to cool gradually.