

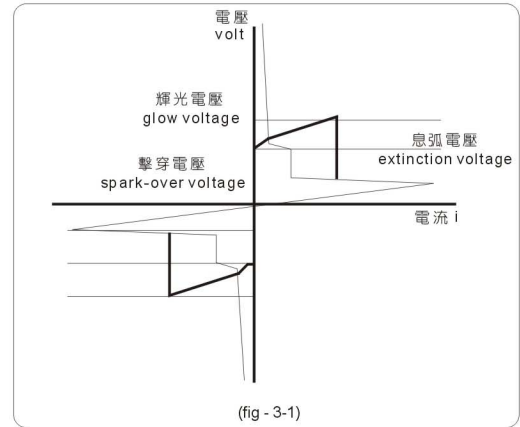
氣體放電管

Operating mode of GDT

A simplified GDT could be compared with a symmetrical switch (with very low capacitance) whose resistance may change from several G-ohms (normal operation) to <1 ohm (ignited by surge voltage). GDT will automatically return to its original state (high impedance) as the surge has subsided.

GDT 之工作原理

在元件部份，可以把GDT視為一對外來電壓會反應之開關(底電壓值)，在未啟動之前的阻抗值為 $>G\text{ohm}$ 。在受外來電壓影響下，其阻抗因電弧這產生，而降至 10ohm 以下，使得與放電管并聯的線路上的電壓無法繼續上升(危害線路)，進而達到保護線路之功能；當異常電壓通過後，GDT將會恢復至原來之高阻抗狀態。



GDT CSP series 玻璃放電管系列

CSP series: UL-497B (Protector for data communication and fire alarm circuit)
E220380: Section 2

特性 Features

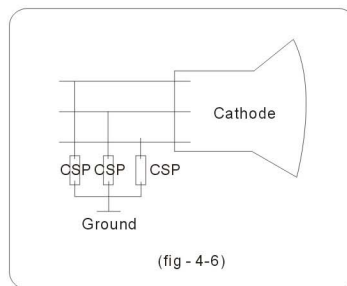
- 回應快 Quick response
- 可承受多次浪涌衝擊 Good withstanding ability to surge
- 電容量小 Low capacitance
- 無方向性(具對稱性) Symmetry in both direction

應用 Applications

CRT 映像管

CRT cathode ray tube

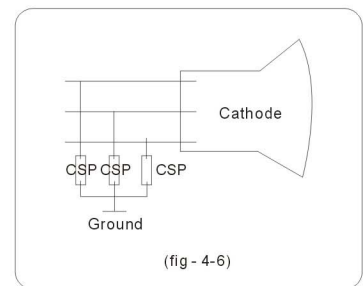
(fig 4-6)



單色螢幕

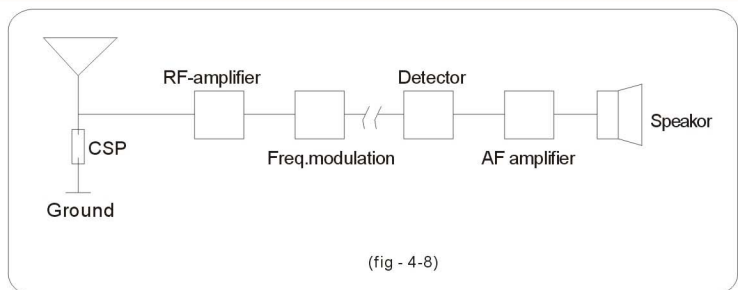
Mono-chrome monitor

(fig 4-7)



Car radio/Radio cassette/
wireless equipment

汽車音響 / 收錄音機 / 無線電設備



Satellite bread casting and TV equipment

擴大機組之保護

