

High Voltage Differential Probe DP Series Introduction



DP10007



DP10013



DP20003

Key performance specifications

- Bandwidths up to 100 MHz
- Maximum Differential Test Voltage (DC+ AC Peak) up to 700V(DP10007),1300V (DP10013), 5600V (DP20003)
- Switchable attenuation: DP10007(10X, 100X), DP10013(50X, 500X), DP20003(200X, 2000X)

Applications

- Floating measurements
- Switching power supply design
- Motor drive design
- Electronic ballast design
- CRT display design
- Power converter design and service
- Power device evaluation

| Model | DP10007 | DP10013 | DP20003 |
|--|---|---|---|
| Bandwidth | 100MHz | 100MHz | 100MHz |
| Rise Time | ≤3.5ns | ≤3.5ns | ≤3.5ns |
| Attenuation | 10X 100X | 50X 500X | 200X 2000X |
| Gain accuracy | ±2% | ±2% | ±2% |
| Maximum Differential Test Voltage (DC+AC PK) | 70V (10X) 700V(100X) | 130V (50X) 1300V(500X) | 560V (200X) 5600V(2000X) |
| Maximum input common mode voltage | CAT I 600V CAT II 1000V | CAT II 1000V | CAT III 1000V |
| Input referred noise | ≤15mV rms (10X) ≤60mV rms (100X) | ≤40mV rms (50X) ≤230mV rms (500X) | ≤160mV rms (200X) ≤920mV rms (2000X) |
| Common Mode Rejection Ratio | ≤-80dB@50Hz ≤-50dB@1MHz ≤-60dB@20KHz ≤-40dB@10MHz | > 80dB (DC) >60dB (100KHz) >50dB (1MHz) | > 80dB (DC) >60dB (100KHz) >50dB (1MHz) |
| Input Impedance | 8MΩ/1.25pF(differential) 4MΩ/2.5pF(single-ended to ground) | 10MΩ/1pF(differential) 5MΩ/2pF(single-ended to ground) | 50MΩ/1.25pF(differential) 25MΩ/2.5pF(single-ended to ground) |
| Output Voltage | ≤7V | ≤3V | ≤3V |
| Overrange Alarm | Button light flashes | Button light flashes | Button light flashes |
| Power Supply | DC 5V,USB Supply | DC 5V,USB Supply | DC 5V,USB Supply |
| Power | 1.25W | 0.85W | 0.85W |
| Dimension | 14.5cm*6cm*2.7cm | 14.5cm*6cm*2.7cm | 14.5cm*6cm*2.7cm |
| Input cable length | Approx 45cm | Approx 45cm | Approx 45cm |
| Output cable length | Approx 90cm | Approx 90cm | Approx 90cm |
| Operating Temperature | 0°C~40°C | 0°C~40°C | 0°C~40°C |
| Operating Humidity | 10%~85% | 10%~85% | 10%~85% |