GDM-398 (NEW)

DC Voltage

Range	Resolution	Accuracy	Input Impedance	Fixed Value Input
400mV	0.1mV	±(0.8%+3)	Around >3000MΩ	1000V dc/ac (Vpp)
4V	0.001V	±(0.5%+1)	Around 10MΩ	
40V	0.01V			
400V	0.1V			
1000V	1V	±(1.0%+3)		

AC Voltage

Range	Resolution	Accuracy 45~400Hz	Input Impedance	Fixed Value Input
400mV	0.1mV	±(1.0%+3)	Around >3000MΩ	1000V dc/ 750Vrms ac
4V	0.001V		Around 10MΩ	
40V	0.01V			
400V	0.1V			
750V	1V	±(1.2%+5)		

Remarks:

- Displays effective value of a sine wave. mV range is applicable from 5% of range to 100% of range.

DC Current

Range	Resolution	Accuracy	Overload Protection
400µA	0.1µA	±(1.0%+2)	Fuse 1: F600mA H 1000V,φ6.35 x 31.8mm
4000µA	1µA		
40mA	0.01mA	±(1.2%+3)	
400mA	0.1mA		
4A	0.001A	±(1.5%+3)	Fuse 2: F10A H 1000V,φ10.3 x 38.1mm
10A	0.01A		

Remarks:

- When ≤ 5A: Continuous measurement is allowed.
- When > 5A: Continuous measurement for less than 10 seconds with intervals of more than 15 minutes between measurements.

GDM-394 (OLD)

DC Voltage

Range	Resolution	Accuracy	Input Impedance	Overload Protection
400mV	0.1mV	±(0.8%+3)	≧ 10MΩ	1000V DC/ 750Vrms AC continuous
4V	1mV	±(0.8%+1)		
40V	10mV			
400V	100mV			
1000V	1V	±(1.0%+3)		

AC Voltage

Range	Resolution	Accuracy 40~400Hz	Input Impedance	Fixed Value Input
4V	1mV	±(1.0%+5)	≧ 10MΩ	1000V DC/ 750Vrms AC continuous
40V	10mV			
400V	100mV			
750V	1V	±(1.2%+5)		

Remarks:

- Displays effective value of a sine wave (mean value response).

DC Current

Range	Resolution	Accuracy	Overload Protection
400µA	0.1µA	±(1.0%+2)	0.5A , 250V, fast type Glass fuse, φ5 x 20mm
4000µA	1µA		
40mA	0.01mA	±(1.2%+3)	
400mA	0.1mA		
4A	0.001A	±(1.5%+5)	10A, 250V, fast type Glass fuse, φ5 x 20mm
10A	0.01A		

Remarks:

-
- 4A & 10A range: Continuous measurement for less than 10 seconds with intervals of more than 15 minutes between measurements.

AC Current

Range	Resolution	Accuracy 45Hz~400Hz	Overload Protection
400µA	0.1µA	±(1.2%+5)	Fuse 1: F600mA H 1000V,φ6.35 x 31.8mm
4000µA	1µA		
40mA	0.01mA	±(1.5%+5)	
400mA	0.1mA		
4A	0.001A	±(2.0%+5)	Fuse 2: F10A H 1000V,φ10.3 x 38.1mm
10A	0.01A		

Remarks:

- When ≤ 5A: Continuous measurement is allowed.
- When > 5A: Continuous measurement for less than 10 seconds with intervals of more than 15 minutes between measurements.
- Displays the effective value of a sine wave.

AC Current

Range	Resolution	Accuracy 40Hz~400Hz	Overload Protection
400µA	0.1µA	±(1.5%+5)	0.5A , 250V, fast type Glass fuse, φ5 x 20mm
4000µA	1µA		
40mA	0.01mA	±(2.0%+5)	
400mA	0.1mA		
4A	0.001A	±(2.5%+5)	10A, 250V, fast type Glass fuse, φ5 x 20mm
10A	0.01A		

Remarks:

-
- 4A & 10A range: Continuous measurement for less than 10 seconds with intervals of more than 15 minutes between measurements.
- Displays the effective value of a sine wave (mean value response).

Resistance

Range	Resolution	Accuracy	Overload Protection	Remark
400Ω	0.1Ω	±(1.2%+2)	1000V dc / ac (Vpp)	When measuring below 2kΩ, apply REL Δ to ensure measurement accuracy.
4kΩ	0.001kΩ	±(1.0%+2)		
40kΩ	0.01kΩ			
400kΩ	0.1kΩ			
4MΩ	0.001MΩ	±(1.2%+2)		
40MΩ	0.01MΩ	±(1.5%+2)		

Resistance

Range	Resolution	Accuracy	Overload Protection	Remark
400Ω	0.1Ω	±(1.2%+2)	1000V dc	When measuring under 400Ω, apply REL Δ to ensure measurement accuracy.
4kΩ	1Ω	±(1.0%+2)		
40kΩ	10Ω			
400kΩ	100Ω			
4MΩ	1kΩ	±(1.2%+2)		
40MΩ	10kΩ	±(1.5%+2)		

Remarks:

Capacitance

Range	Resolution	Accuracy	Overload Protection	Remark
40nF	0.01nF	±(3.0%+5)	1000V dc / ac (Vpp)	There is around 10nF residual reading when the circuit is open
400nF	0.1nF			
4µF	0.001µF			
40µF	0.01µF			
400µF	0.1µF	±(4.0%+5)		
4000µF	1µF	unspecified		

Capacitance

Range	Resolution	Accuracy	Overload Protection	Remark
40nF	10pF	±(3.0%+10) with REL	1000Vp	
400nF	100pF	±(3.0%+5)		
4µF	1nF			
40µF	10nF			
100µF	100nF	±(4.0%+5)		

Frequency

Model	Range	Accuracy	Maximum Resolution
Frequency	10Hz~10MHz	±(0.1%+4)	0.01Hz
Duty Cycle	0.1%~999.9%	unspecified	0.1%

Remarks:

- Overload Protection: 1000Vdc/ ac (Vpp)
- Input Amplitude: (DC offset is zero)
  - When 10Hz ~ 10MHz: 200mV ≤a ≤ 30Vrms
  - When measuring on line frequency or duty cycle under AC Voltage and Current measurement mode, the input amplitude and frequency response must satisfy the following requirement:
    Input amplitude ≥range x 30%
    Frequency response: ≤ 400Hz

Frequency / Duty Cycle

Model	Range	Accuracy	Maximum Resolution
Frequency	10Hz~10MHz	±(0.1%+3)	
Duty Cycle	0.1%~99.9%	unspecified	0.01%

Remarks:

- Overload Protection: 1000Vp
- Sensitivity:
  - When ≤1MHz: 300mVrms ≤ input sensitivity ≤ 30Vrms
  - When >1MHz: 600mVrms ≤ input sensitivity ≤ 30Vrms

Diode Test

Model	Resolution	Remarks	Overload Protection
GDM-398	0.001V	Open circuit voltage around 2.8V	1000Vdc / ac (Vpp)

Diode Test

Model	Resolution	Remarks	Overload Protection
GDM-394	1mV	Open circuit voltage around 1.48	1000Vp

Remarks:

- Display approximate forward voltage drop reading 0.5~0.8V

Continuity Test

Model	Resolution	Overload Protection
GDM-398	0.1Ω	1000Vdc / ac (Vpp)

Remarks:

- Open circuit voltage is around 0.45V.
- Broken circuit resistance value is around > 35Ω, the buzzer does not beep.
- Good circuit resistance value is ≤10Ω, the buzzer beeps continuously.

Continuity Test

Model	Resolution	Overload Protection
GDM-394	0.1Ω	1000Vp

- Remarks:
- Open circuit voltage is around 0.45V.
- Approximate value is ≤100Ω, the buzzer beeps continuously.
- Range : 400.0Ω

Temperature Measurement	Temperature Measurement
Transistor hFE Range / Resolution / Remark hFE / 1β / Ibo≈10μA; 1000β MAX	Transistor hFE
RS232C Serial Port – No functional	
Other Functions MODEL GDM-398 Max. Display 3999 Auto Ranging √ Analog Bar √ True RMS √ Display Backlight √ Fused 10A Range √ Auto Power off √ Diode √ Continuity √ Temperature Duty Cycle(%) √ Transistor (hFE) √ REL √ Data Hold √ Peak Hold MAX MIN √ RS232C EF Function √	Other Functions: MODEL GDM-394 Max. Display 3999 Auto Ranging √ Analog Bar True RMS Display Backlight √ Fused 10A Range √ Auto Power off √ Diode √ Continuity √ Temperature Duty Cycle(%) √ Transistor (hFE) REL √ Data Hold √ Peak Hold MAX MIN RS232C EF Function