



Rapid-Rate Temperature Cycle Chamber- GFG-200-25

Balanced Temperature Control (BTC) System and PID control makes highly accurate temperature/humidity control possible



- ▶ Suitable for semiconductor electronic devices, solder joint life assessment, and reliability testing of semiconductor packaging.
- ▶ Suitable for reliability testing of automotive electronic components, automotive battery management systems (BMS), automotive electronic control systems, etc.
- ▶ Able to effectively meet the requirements and industry standards of high-end electronic, semiconductor, and automotive industry customers.

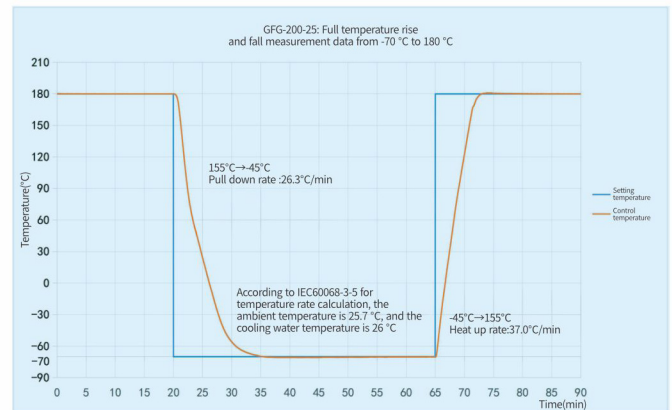
Can meet the evaluation and testing requirements of JEDEC and IEC standards.

JESD22-A104F(*Please consult the sales company first)
 IEC60749-25(*Please consult the sales company first)
 IEC60068-2-14 Nb((JIS C 60068-2-14 Nb))
 EIAJ ED-2531B Nb
 JESD22-A105C
 IPC-9701
 IPC-TM-650 2.6.6 B
 LV 124 L-03V
 SAE J1211

(Note: Load: 5kg epoxy plate, 4kg stainless steel, no heat)

Compact structure with High performance

Temp change rate:25 K/min.
 Temp range:-70°C~+180°C
 Volume:216L



GFG-200-25: Full temperature rise and fall measurement data from -70 °C to 180 °C



ESPEC TEST EQUIPMENT (GUANGDONG) CO.,LTD
 NO.14,Meide 2nd Road, Pearl River Street,
 NanSha ,GuangZhou.China. 511462
 Tel:(86)20-8452-8103 Fax:(86)20-8452-8107
 E-Mail: info@gd-espec.com

<http://www.gd-espec.com/>



Features:

Energy efficiency and Environmental

When operating below 0°C, it is basically possible to operate temperature control (PID control) with the refrigerator only, when the heater output is OFF.

Interface (option)for device communication can be selected between RS-485, GPIB,Web Lan and RS-232C.

Cable ports on both sides (Ø50mm) as standard to allow easy wiring access.

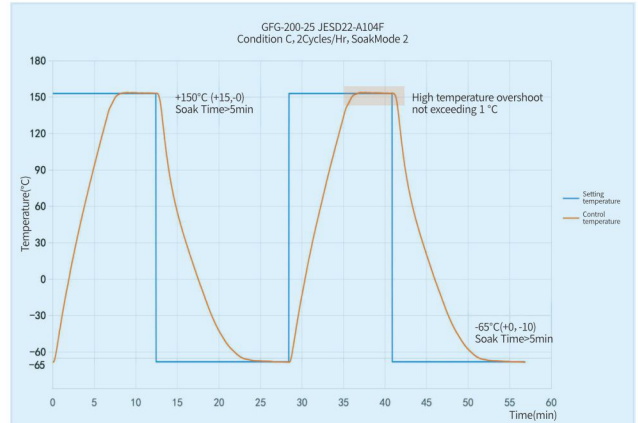
Color LCD touch screen controller, easy to operate

- ▶The controller can choose between continuous operation and program operation to adapt to different applications.
- ▶Programmed operation allows storing 40 program operation patterns, each up to 99 steps. temperature ramp settings and a maximum of 999 repeat cycles.
- ▶Multilingual display:Can change the display language at any time from the language icon.
- ▶USB output of trend graph data.

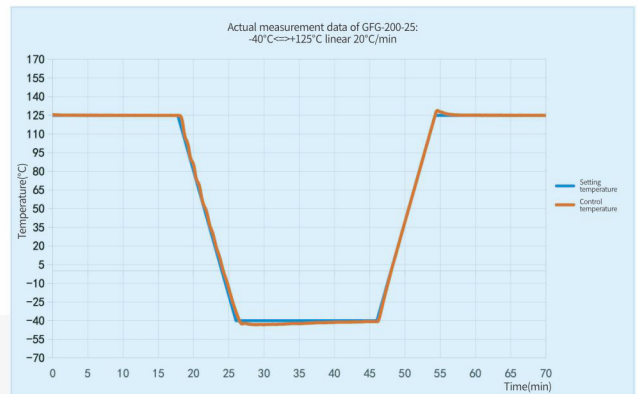
A wide range of options can be added to meet the diverse needs of customers.

Additional safety options such as pressure relief valves, smoke sensors, emergency push stop button, alarm output terminals and three color status indicator warning Lights are available.

*More detail please see HP:<http://www.gd-espec.com/en/>



Actual measurement data of GFG-200-25:JESE22-A104 Condition C,2Cycles/Hr,SoakMode 2



Actual measurement data of GFG-200-25:-40°C<=>+125°C linear 20°C/min

Temp type-Model	GFG-200-25	
System	Balanced Temperature Control (BTC) System	
Power Supply & Max.Load Current(A)	AC380V 3φ 4W 50Hz (52A)	
Allowable ambient conditions	Ambient Temperature:0~+40°C;Relative Humidity: Up to 75%rh ;Cooling water temperature:+5~+32°C	
Performance ※	Temp Range※1	-70~+180°C
	Temp.fluctuation※1	±0.5°C
	Temp.variation※1	±2°C
	Temp.rate of Change (IEC60068-3-5)	Heat Up:25°C/min Pull Down:25°C/min (Temp range-45°C↔+155°C)
	Temperature Extremes Achievement Time (IEC60068-3-5)	Heat Up:+20°C to +180°C<8 min Pull Down:+20°Cto-70°C<10 min
	Allowable Heat Load (Temp inside chamber:+20°C.)	9000W
Constr-uction System	Air Circulator Propeller fan Mechanical double-stage refrigeration system	
Inside Dimensions (W×H×Dmm)	600×900×400	
Outside Dimensions (W×H×Dmm)	1040×1725×1780	
Volume (L)	216	
Weight (Kg)	800	

※1 The temperature chamber's performance values are based on GB/T5170.2,and IEC60068-3-5.And humidity chamber's performance values are based on GB/T5170.5 and IEC60068-3-6.Performance figures are given for a +23°C ambient temperature, relative humidity 65±20% RH, rated voltage, with no specimens inside the test area.

Meet the following conditions of JESD22-A104F and IEC 60749-25 standards:

Test specifications	Temperature setting		Temperature change rate	Holding time	Number of cycles	Judgment of test results	
	High	low					
JESD22-A104F	A	+85	-55	Specimen Less than15°C/min	1, 5, 10, 15min	No regulations	OK
	B	+125	-55				OK
	C	+150	-65				OK
	G	+125	-40				OK
	H	+150	-55				OK
	I	+115	-40				OK
	J	+100	0				OK
	K	+125	0				OK
	L	+110	-55				OK
	M	+150	-40				OK
	N	+85	-40				OK
	R	+125	-25				OK
	IEC 60749-25	T	+100				-40
A		+85	-55	OK			
B		+125	-55	OK			
C		+150	-65	OK			
G		+125	-40	OK			
H		+150	-55	OK			
I		+115	-40	OK			
J		+100	0	OK			
K		+125	0	OK			
L		+110	-55	OK			
M		+150	-40	OK			
N		+80	-30	OK			
O		+125	-25	OK			
P	+125	-65	OK				