

GPTF High-Voltage Test Fixture



GPTF High-Voltage Test Fixture provides a safe, high-integrity, interlocked platform, for use up to **5KV** with Breakdown Voltage (DWV), Insulation Resistance (IR), Hi-Pot and Low Leakage test and measurement systems for passive devices.



GPTF - Standard configuration up to 5KV DC or AC peak

Key features:

Low-Leakage Current Features

- Fully shielded construction
- Measurement paths guarded

High-Voltage Safety Features

- Unit under test is completely enclosed
- Access lid low voltage sense switch
- Access lid mechanical solenoid interlock

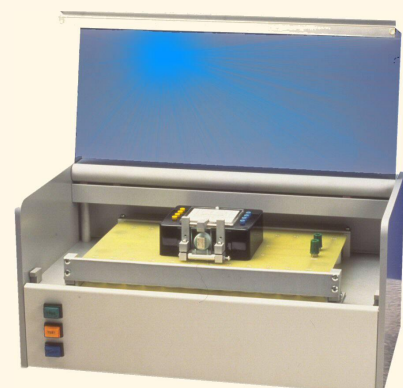
Flexible Adapter Boards

- Easily interchangeable adapter boards
- Accommodates unit under test (UUT) up to 5 cm high
- High-Voltage adapters for DWV & Hi-Pot
- Surface mount, through hole and modular sockets
- Custom footprint sockets

Description:

GPTF provides a closed screened case with an interlocked and transparent safety lid housing 24 spring loaded test probes. A range of adapter cards can be inserted into the test fixture to quickly and reliably connect to these probes, offering a range of connectivity from an uncommitted "terminal based" adapter card, through to complex surface mount component adapters and dedicated high-voltage adapters

Within the test fixture 22 of these 24 test probes are fitted with the popular "SHV" connectors which enable them to be cabled directly to the host equipment, such as the REFLEX 901 high-voltage test system .



Operation:

The user lifts the access lid to change the device adapter or insert/remove the device under test during normal testing.

GPTF adaptor control signals are connected to control the access lid mechanical solenoid interlock, and control the PASS and FAIL indicators and monitor the status of the TEST switch.

The test fixture uses these control signals together with the REFLEX 901 High-Voltage interlock circuits and the mechanical solenoid interlock on the access lid to provide a secure environment, protecting the user against risk of shock.

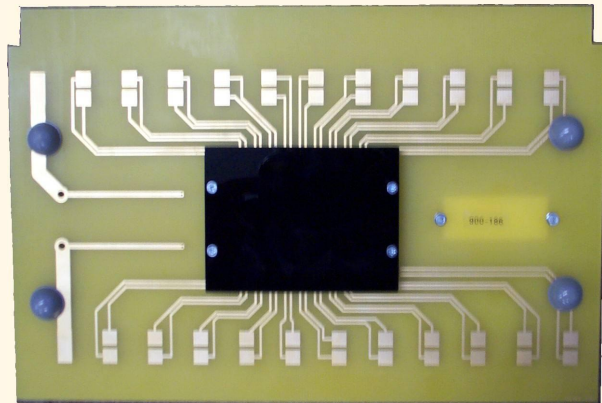
In the idle state the mechanical solenoid interlock is released and the fixture unpowered. In normal operation, the user lifts the lid of the test fixture to insert an adapter or the device to be tested. When the lid is open, a low-voltage lid sense switch is OPEN. This is used by the REFLEX 901 test system to determine the lid status and if OPEN to isolate the distribution of high-voltages from the tester to the test fixture.

When the user closes the lid, the low-voltage lid sense switch is CLOSED and this allows power to be applied to the lid interlock solenoid and test voltages applied to the fixture pins when the next test is started. The user starts the test sequence by pressing the "TEST" button on the test fixture front panel.

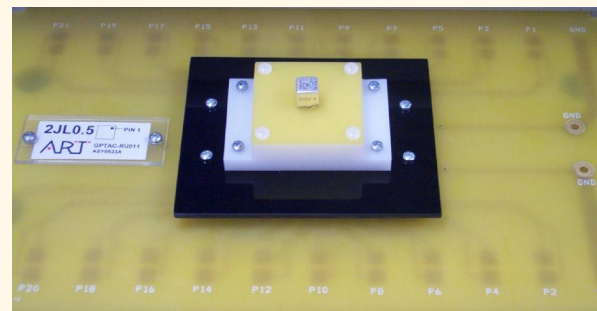
The test runs until complete and test voltages are removed from the fixture under program control. Power is removed from the solenoid at the end of the test sequence, releasing it. When the solenoid is released the system returns to the idle (unpowered) state with the lid unlocked.

The ART REFLEX 901 DWV/IR Test System can be configured to supply suitable control signals for GPTF.

For use with other test systems ART can supply an integrated interface module that allows connection to TTL only control signals (BUSY, PASS, FAIL etc) each with optional polarity to suit any interface.



Example of custom high-voltage adapter board



Example of custom high-voltage test socket

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Ordering Information

Order Code: GPTF

Please contact ART to discuss your specific test requirements for this custom high-voltage test fixture and a list of currently available adapter boards for guarded and unguarded test applications