# Micsig

# SigOFIT<sup>TM</sup> Optical-fiber Isolated Probe Unveil Real Signal You've Never Seen

Based on Micsig's exclusive SigOFIT™ technology, the SigOFIT optical-fiber isolated probe has extremely high CMRR and isolation voltage, unveils the whole truth of the signal within bandwidth range, it adopts advanced laser power supply technology, perfectly solves the problem of isolated power supply.

# **Applications:**

- · Design of motor drive, power converter, electronic ballast
- · Design & analysis of GaN, SiC, IGBT Half/Full bridge devices
- · Design of inverter, UPS and switching power supply
- · Safety test for high voltage, high bandwidth applications
- · Power device evaluation
- · Current shunt measurements
- · EMI & ESD troubleshooting
- · Floating measurements



Version updated: March 20, 2024

# **Key Features:**



# **Present True Signal**

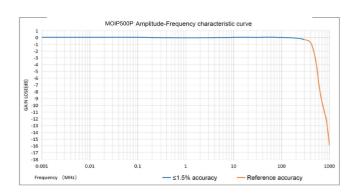
 SigOFIT probe delivers highest CMRR: over 128dB at 100MHz, up to 108dB at 1GHz. It's the ultimate referee of signal fidelity measured by other voltage probes.

# **Best Probe for Third-Gen Semiconductor**

 Device like SiC and GaN can switch high voltages in a few nanoseconds, containing very high-energy high-frequency harmonics.
 Even at the highest bandwidth, the SigOFIT probe still have over 100dB CMRR in max. bandwidth, perfectly suppress oscillation caused by high-frequency common-mode noise, it's the best choice for third-generation semiconductor test and measurement.

# **Highest Accuracy**

SigOFIT probe has excellent amplitude-frequency characteristics.
 DC gain accuracy ≤1%, while noise ≤ 0.45mVrms. Zero drift
 <0.1% (works 5 mins later), gain drift also <1%.</li>





## Safe to Test Gallium Nitride (GaN)

 The test leads of SigOFIT probe are short and with coaxial cable transmission, the input capacitance is as low as 1pF minimum, very safe to test GaN.

# **Wide Measurement Range**

 Unlike traditional differential probes can only test high-voltage signals, the SigOFIT probe can be used with different attenuator tips to test differential mode signals from ±0.01V to ±6250V, achieving full-range output and very high signal-to-noise ratio.

# **Compact & Simple**

 Smaller size than traditional differential probes, more accurate probe tips, makes it much easier and flexible to use.

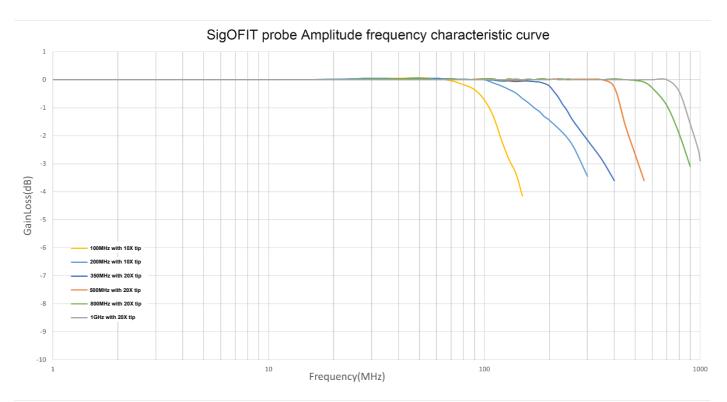
# **Efficient & Affordable**

 Fastest response, can be tested immediately after power-on, Auto Calibration in less than 1 second, ensures accurate signal outputin real time.

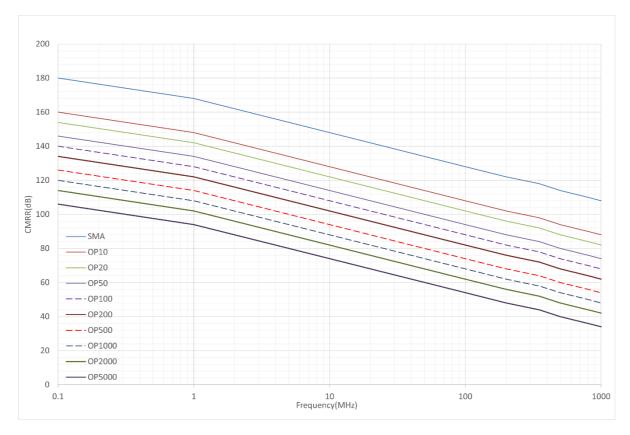


# **Specifications:**

Model & Ordering Name	MOIP100P	MOIP200P	MOIP350P	MOIP500P	MOIP800P	MOIP1000P
Bandwidth	100MHz	200 MHz	350 MHz	500 MHz	800 MHz	1 GHz
Rise time	≤3.5ns	≤1.75n	≤1ns	≤700ps	≤438ps	≤350ps
CMRR	DC: 180dB 100MHz: 128dB	DC: 180dB 200MHz: 122dB	DC: 180dB 350MHz: 118dB	DC: 180dB 500MHz: 114dB	DC: 180dB 800MHz: 110dB	DC: 180dB 1GHz: 108dB
Differential Voltage Range	±6250V			±5000V		
Noise	<450μVrms			<450µVrms		
DC Gain accuracy	1%					
Common mode voltage range	85kVpk					
Fiber cable length	2m (Customizable)					



▲ Amplitude-frequency characteristics of different SigOFIT probes



▲ CMRR of different types of attenuators (0dB) at various frequencies.

- \* Please refer to datasheet for more information
- \* Micsig reserves the right of final interpretation for the content hereinabove, it is subject to update without prior notice.

# Micsig