# Micsig

# SigOFIT Optical-fiber Isolated Probe Unveil Real Signal You've Never Seen

Based on the exclusive SigOFIT<sup>™</sup> 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 is the ultimate referee to the fidelity of the signal measured by other voltage probes. In addition, the SigOFIT probe adopts advanced laser power supply technology, perfectly solved the isolated power supply problem.

### **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



## **Key Features:**

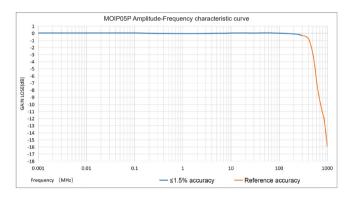


**Present True Signal** 

• SigOFIT probe delivers highest common mode rejection ratio, CMRR up to 112dB at 100MHz, over 100dB at 500MHz. 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 nearly 100dB CMRR, perfectly suppress oscillation caused by highfrequency common-mode noise, no redundant components, it's the best choice for third-generation semiconductor test and measurement.



#### Safe to Test Gallium Nitride (GaN)

• The test leads of SigOFIT probe are short and with coaxial cable transmission, has less than 3pF input capacitance, very safe to test GaN.

#### Wide Measurement Range

OP20-2

10X / 20X / 50X / 500X / 1000X / 2000X

 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 ±1.25V to ±2500V, achieving full-range output and very high signal-to-noise ratio.

#### **Highest Accuracy**

 SigOFIT probe has excellent amplitude-frequency characteristics. DC gain accuracy up to ≤1%. The maximum noise floor within the range is 1.41mVrms, and zero drift is less than 500µV after warmup.



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

#### Efficient & Affordable

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



## **Specifications:**

Model	MOIP01P	MOIP02P	MOIP03P	MOIP05P	MOIP08P	MOIP10P		
Bandwidth	100MHz	200MHz	350MHz	500MHz	800MHz	1GHz		
Rise Time	≤3.5ns	≤1.75ns	≤1ns	≤700ps	≤438ps	≤350ps		
SMA Input Impedance	1MΩ    10pF		1MΩ    10pF					
Output Voltage	±2.	5V	±1.25V					
Measuring Voltage	1X: ±2.5V 10X: ±25V 20X: ±50V 500X: ±1250V 1000X: ±2500V		1X: ±1.25V 20X: ±25V 50X: ±62.5V 1000X: ±1250V 2000X: ±2500V					
Noise	<1.41mVrms							
Propagation Delay	15.42ns (2 meter cable)							
Power Supply	Type-C, DC: 5V							
DC Gain Accuracy	1%							
Common Mode Voltage Range	60kVpk							
Cable Length	2 meter (Customizable)							

#### Attenuator Ratio, Input Impedance

Probe Tip	Attenuation Ratio	Input Impedance				
SMA Input	1X	1MΩ    10pF				
OP10 Input	10X	10MΩ    3.0pF				
OP20 Input	20X	9.47MΩ    2.8pF				
OP50 Input	50X	9.47MΩ    2.8pF				
OP500 Input	500X	12.27MΩ    2.6pF				
OP1000 Input	1000X	12.28MΩ    2.6pF				
OP2000 Input	2000X	30MΩ    1pF				

Common Mode Rejection Ratio (CMRR)									
Probe Tip	DC	1MHz	100MHz	200MHz	350MHz	500MHz	800MHz	1GHz	
SMA	160dB	152dB	112dB	106dB	102dB	100dB	94dB	92dB	
OP10	160dB	120dB	96dB	92dB	90dB	86dB	84dB	82dB	
OP20	160dB	120dB	92dB	90dB	86dB	84dB	82dB	80dB	
OP50	160dB	115dB	86dB	82dB	80dB	78dB	75dB	74dB	
OP500	160dB	96dB	56dB	48dB	40dB	32dB	28dB	26dB	
OP1000	160dB	90dB	90dB	42dB	34dB	26dB	22dB	20dB	
OP2000	160dB	90dB	90dB	42dB	34dB	26dB	22dB	20dB	

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