

Product Name: ZX050C-MSOP-10EP (MSOP-10 MSOP10EP TSSOP10) Characterization testing bringup breakout module

Product Description: High Speed characterization module meeting 10GHz signal bandwidth with < 0.3dB insertion loss. Each pin of the device under test, U1, is accessible via 2 dedicated SMA connectors for external stimulus as well as measurement purpose.

ZX050C-MSOP-10EP is designed for ASIC (IC) characterization, functional testing of MSOP10 MSOP10EP (exposed Pad) and most of TSSOP10 or equivalent footprint packaged device. ZX50C-MSOP-10EP is designed with 50 Ω (Ohms) trace impedance using 4 layer PCB. The module includes 35μ gold plated SMA connectors.

Ideal evaluation, bringup, and testing of any discrete component such as ESD diode, sensor, or any IC using MSOP-10 MSOP-10EP TSSOP10 footprint package.

Available SS1, SS2 optional stuffing to GND via U1 pin 5. The SS1, SS2 are standard 0402 SMD package footprint. User may apply any standard 0402 device as required, resistor, capacitor, bead.

SS3 optional stuffing to GND via U1 pin EP, if available. The SS3 is standard 0402 SMD package footprint. The landing pads are shorted, connecting EP to GND. User may cut aof the SS1, SS2, SS3 trace between the landing pads.

Available GND test point header pin interfacing with the module's GND plane & GND fills

Application: Bringup, Characterization, testing, development, modular design evaluations

Target DUT : Designed specifically for any MSOP-10 MSOP-10EP TSSOP10 SMD device with SMA connectors accessing all pins of the MSOP-10 MSOP-10EP TSSOP10

Pitch: Standard MSOP10 MSOP10EP TSSOP SMD package or equivalent

Headers: Ground access test point (GND) - 0.025" SQ with 0.32" (5.6mm) post height

DUT landing pads: Surface Mount, 10 pins package – MSOP-10 MSOP-10EP and possibly TSSOP10 or equivalent

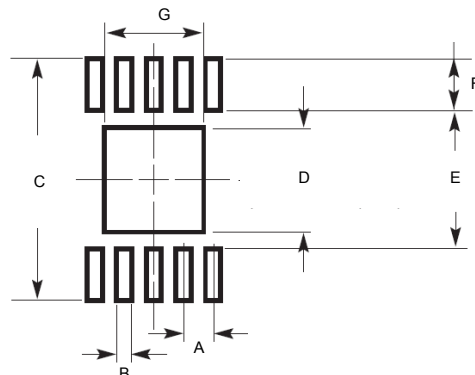
MSOP10-EP DIMENTIONS (mm)

| UNIT | | A | B | C | D | E | F | G |
|------|---------|-------|-------|-------|-------|-------|-------|-------|
| mm | max | 0.500 | 0.343 | 5.100 | 1.600 | 3.400 | 1.400 | 1.880 |
| | Typical | | 0.305 | | | | | |
| | min | | 0.267 | | | | | |

| OUTLINE Version | REFERENCES | | |
|-----------------|------------|-----------|-------|
| | IEC | JEDEC | JEITA |
| SOT505 | | MO-187-AA | |
| SOT505 | | MO-187-AB | |
| SOT505 | | MO-187-DA | |

SMA:
 Impedance: 50Ω
 Temp Range: -65°C +165°C
 Vibration: MIL-STD-202, Method 213
 Frequency Range: DC – 12GHz
 Working Voltage: 335V max
 Withstand Voltage: 1000V rms
 Center Contact: ≤3mΩ
 Outer Contact: ≤2mΩ
 Insulation resistance: ≥5000MΩ
 VSWR Straight: ≤1.15 (0.8-2.5G)

Pad Layout

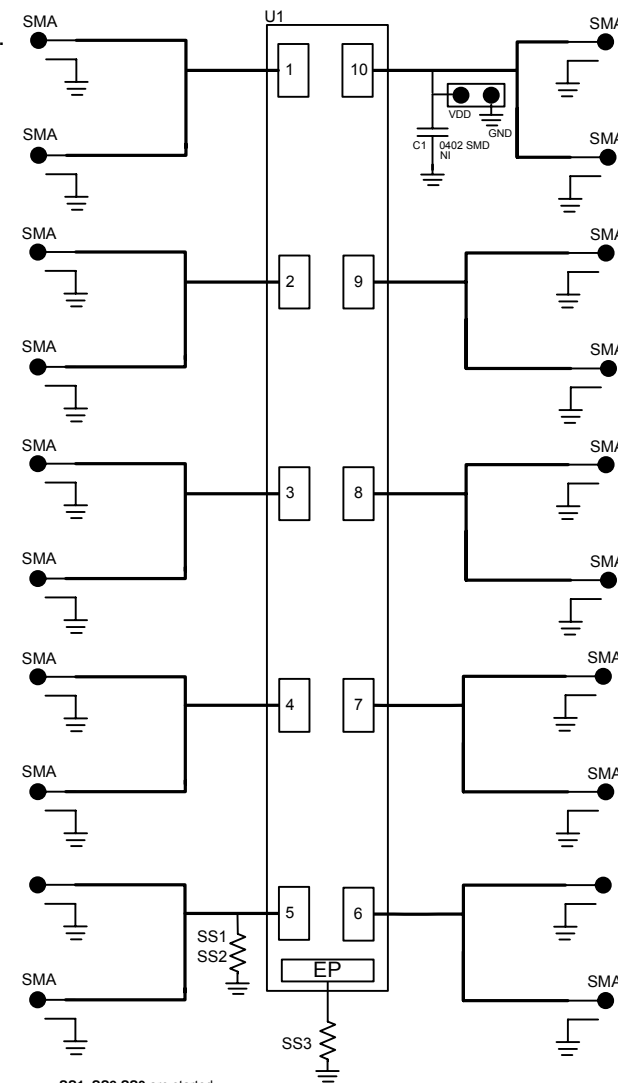


Notice

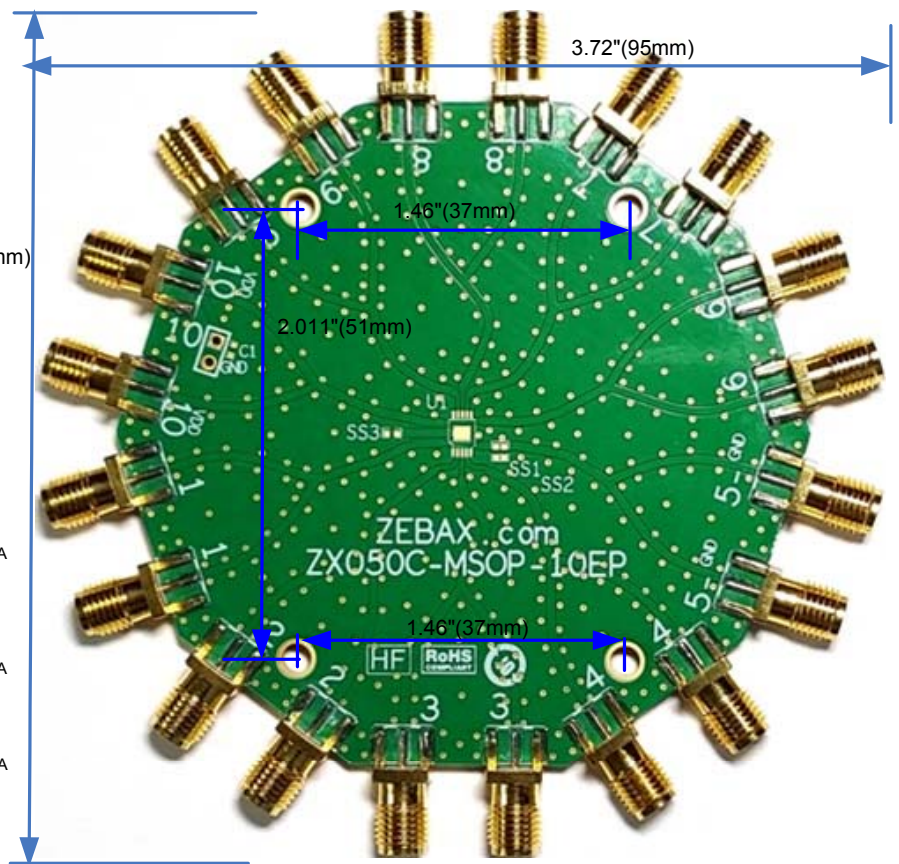
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Simplified Block Diagram:



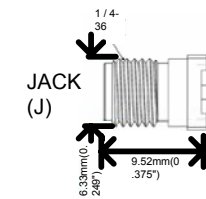
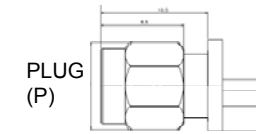
SS1, SS2 SS3 are started 0402 SMD package footprint with shorted landing pads.



Ordering INFO:

Part Number
 ZX050C-MSOP-10EPJ SMA Jack Connector type (standard)
 ZX050C-MSOP-10EPP SMA Plug connector type

NOTE: ZX050C-MSOP-10EP is shipped without DUT. All SMA connectors are installed.



Note
 ALL ZEBAX products are RoHS compliant and Lead Free unless otherwise indicated.

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SPECIFIED DIMENSIONS ARE INCHES (MM). ROHS COMPLIANT
ASSEMBLY DRAWING
ITEM: ZX050C-MSOP-10EP

DESCRIPTION: MSOP-10 MSOP-10EP characterization testing bringup breakout adapter SMA

CHECKED: M. MARINA
 DRAWN: SLAVIK
 REVISION: 1.0
 SHEET: 1 OF 1