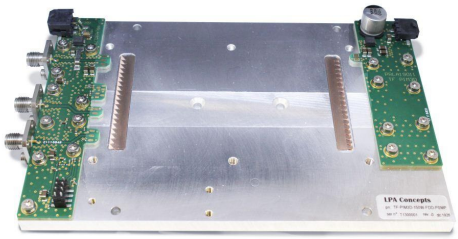
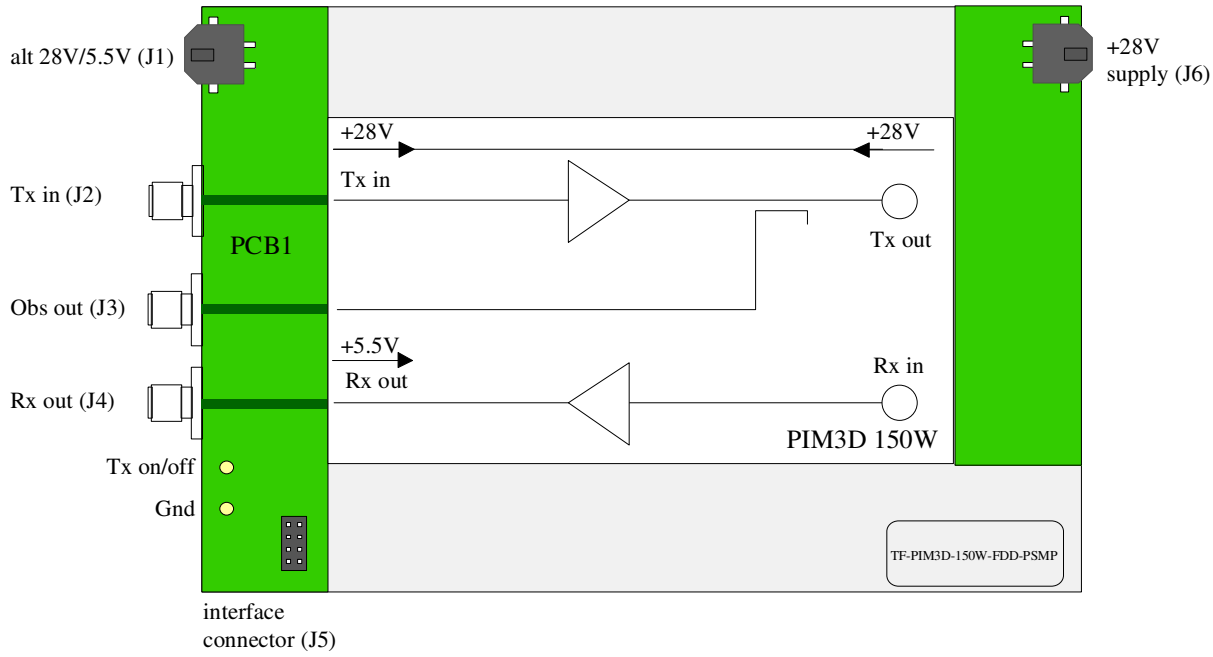
PIM3D TEST FIXTURE	TF-PIM3D-150W-FDD-PSMP
T130	
APPLICATIONS ♦ QUICK SET UP FOR PIM3D 150W FDD MODULES EVALUATION ♦ USED WITH PSMP HIGH ISOLATION MODULES ♦ COMPATIBLE WITH FDD-TDD ♦ MEASUREMENT STANDARD FOR PIM3D MODULES ♦ 100MHz-4GHz	

Block diagram:



Electrical characteristics: 50 ohms Load module

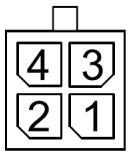
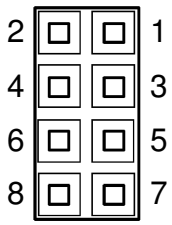
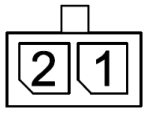
Ref	parameter	conditions	note	min	typ	max	units
1	Return loss Tx in	0-4GHz		-18	-22		dBc
2	Return loss Obs out	0-4GHz		-18	-22		dBc
3	Return loss Rx out	0-4GHz		-18	-22		dBc
4	Isolation Tx in - Obs out	0-4GHz	1	-70	-75		dBc
5	Isolation Tx in - Rx out	0-4GHz	1	-75	-80		dBc
6	Isolation Tx out - Rx in	0-4GHz	1	-70	-75		dBc

(1) measured with load module and T170 PSMP to SMA adaptor

Mechanical :

Ref	Designation	Description	Remarks
1	Base plate size	100.0 mm x 150.0mm x 7.0mm	
2	PIM3D Mounting	6 M3 x 8 CHC Screws (supplied with T100)	Do not use thermal grease between PIM3D and base plate
3	PCB1	FR4 multilayer board 1.6mm thick	See APNT18002C for outline
4	PCB2	FR4 double sided board 1.6mm thick	See APNT18002C for outline

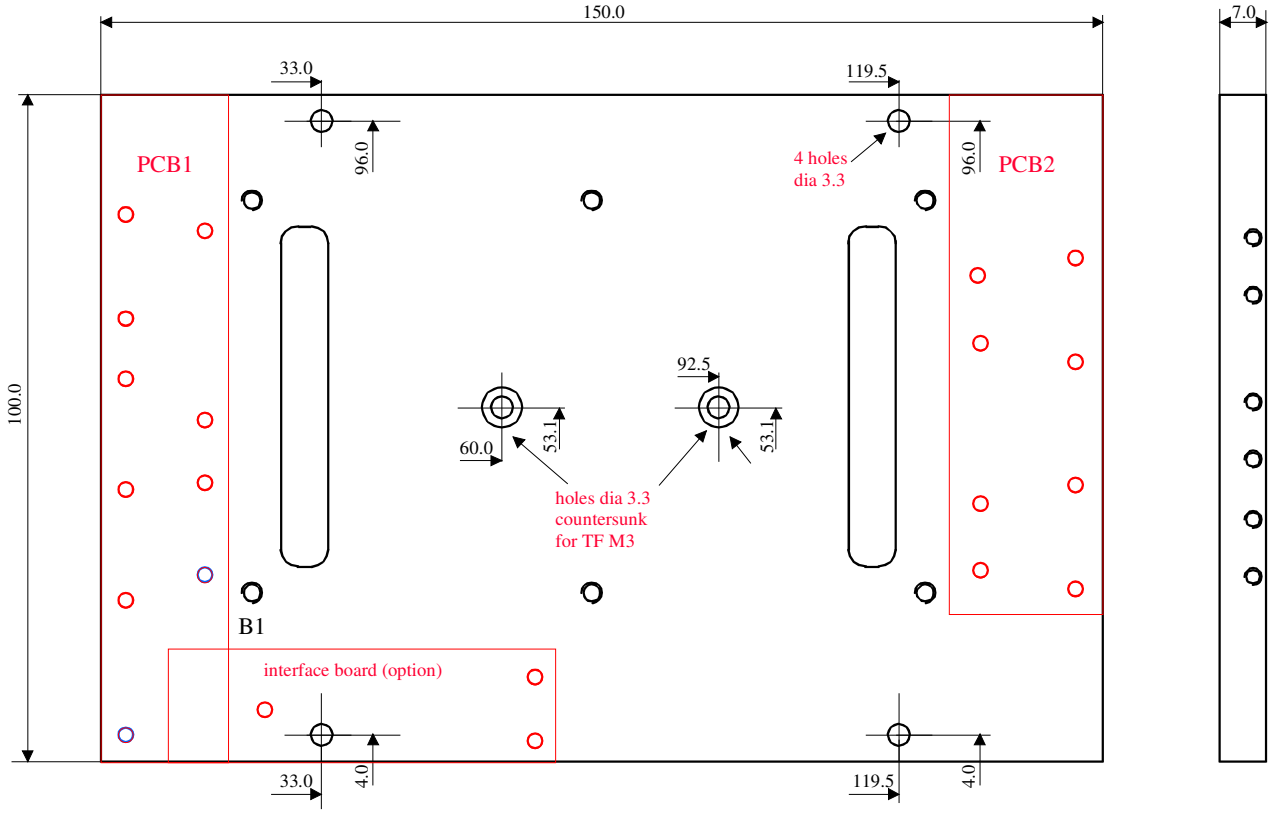
Connectors :

Ref	Type	Description	Remarks
J1	28V/6V DC POWER (1) Molex Microfit Header 43045-0409 Mate with Molex Microfit Receptacle Housing 43025	1 , 3 : GND 2 : +28V 4 : +6V	
J2	RF Tx input	SMA female	
J3	RF PA Observation Output	SMA female	
J4	RF Rx output	SMA female	
J5	Interface connector 2x4 2mm female Samtec CLT-104-02-D-A	1 ALCRX 2 PA Mute (3) PA Mute= 0V ⇒ TX OFF PA Mute= 3V ⇒ TX ON 3 Preverse 4 28V 5 I2C : SDA 6 Gnd 7 I2C : SCL 8 NC	
J6	28V DC POWER from output (1) Molex Microfit Header 43650-0213 Mate with Molex Microfit Receptacle Housing 43645	1 : GND 2 : +28V	

(1) cable equiped with banana plugs is provided with T130 for quick start up
(2) 28V can be supplied either through J1 or J6. J6 can be preferred in applications.
(3) pin2 of J5 is also connected to TxRx post on PCB for ease of connection for TDD module test.

Specifications and information are subject to change without notice

Base plate configuration :



Mounting holes for heatsink (option) : 4 CHC M3 + 2 TF M3 countersunk under module

Mounting holes for interface board (option) : 3 M2.5 holes for PCB spacers

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Accessories (options) :

Ref	Part number	Description	Product code
1	TF-PIM3D-PSMP-SMA-ADAPTOR	PSMP to SMA adaptor	T170
2	TF-PIM3D-INTERFACE01	I2C to RS485 Interface board with GUI	T140
3	TF-PIM3D-150W-HS	Heatsink (150W)	T160

Notes :
1. It is recommended to use the T130 test fixture with a T170 PSMP-SMA adaptor on the PIM3D module
2. Interface board and heatsink are options.
3. Refer to specific PIM3D module specifiation for more information

Support documents:

Ref	Document type	Document number	Title	Date
1	Application Note	APNT17001B	PIM3 Module product line	12/2018
2	Application Note	APNT18002C	Using PIM3D modules	12/2018

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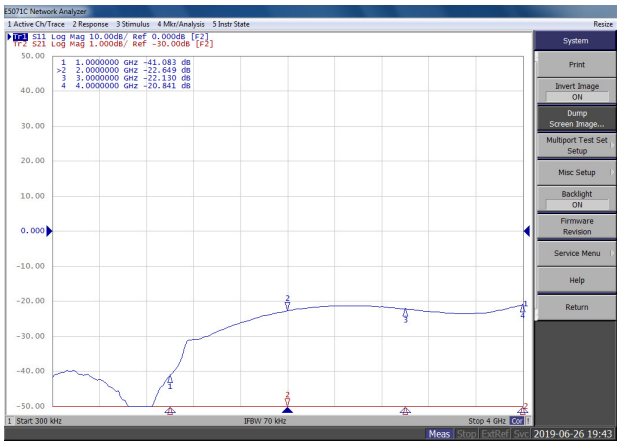
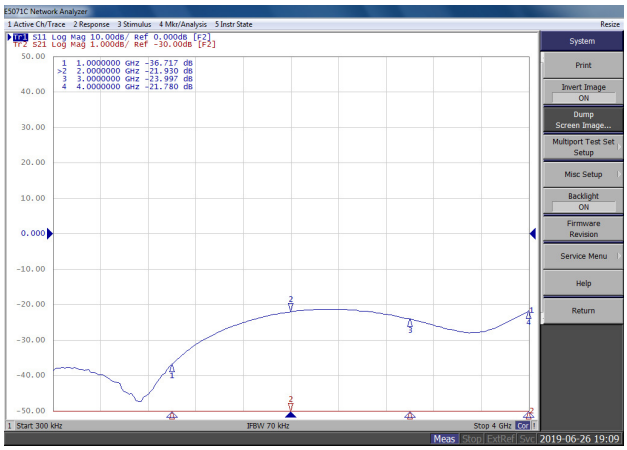
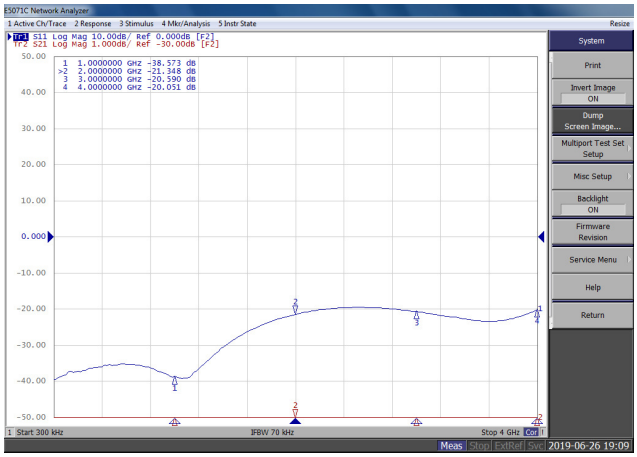
TYPICAL PERFORMANCE (50ohms load module)



TX IN RETURN LOSS



OBS OUT RETURN LOSS



RX OUT RETURN LOSS

Specifications and information are subject to change without notice