

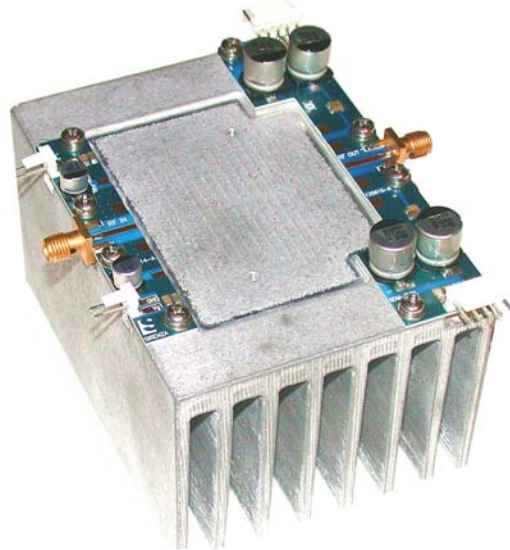


## Product Description

The SDM-EVAL connectorized fixture supports test and measurement of the SDM series of LDMOS modules available from Sirenza. The fixture includes convenient SMA female RF connectors along with a DC header to facilitate amplifier characterization, or rapid system prototyping. The test circuit is mounted on an aluminum heatsink that requires forced air cooling to ensure proper device operating temperatures.

## SDM-EVAL

### Test Fixture for Sirenza SDM Module Series



### Product Features

- 50 Ohm SMA (F) Interface
- Integrated Aluminum Heatsink
- Supports “B” packages

### Applications

- Product Test and Evaluation
- Rapid System Prototyping
- Product Qualification

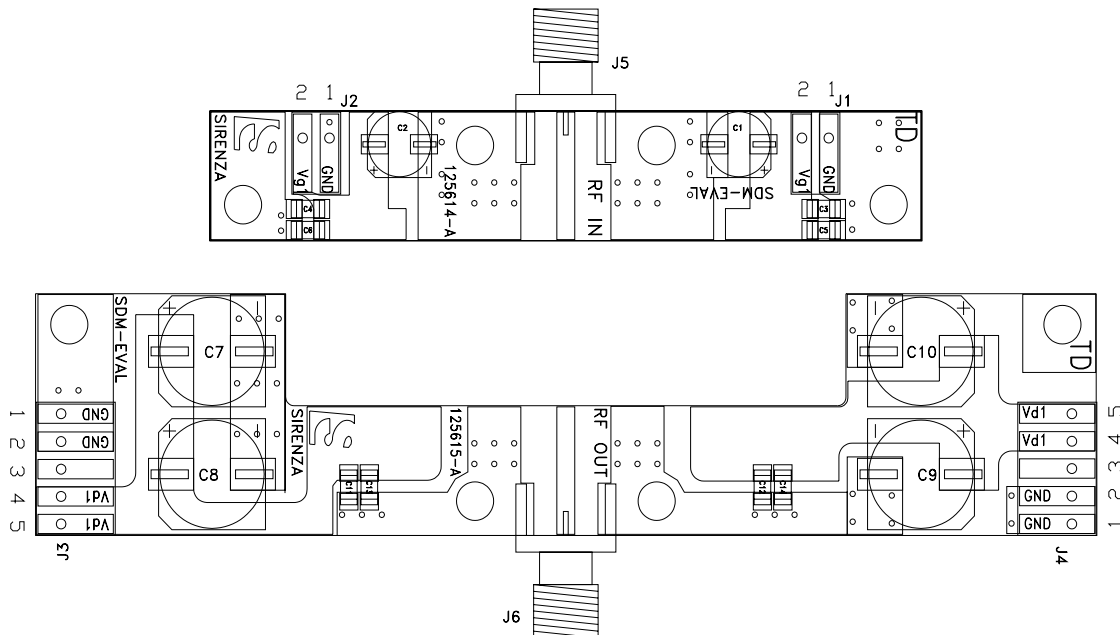
## Basic Bill of Materials

Manufacturer	Mfg Part #	Item Description	Qty	Ref Des
Panasonic	EEV-HB1V220P	CAP, 22 UF, 35V, 20%, Lytic	2	C1,C2
Johanson Technology	101R18W104KV4E	CAP 0.1 UF,100V,10%,1206,LEAD FREE	4	C11,C12, C3,C4
Johanson Technology	101R18W102KV4E	CAP 1000 PF,100V,10%,1206,LEAD FREE	4	C5,C6, C13,C14
Panasonic	ECE-V1HA221P	CAP, 220 UF, -40 TO 85°C, 50V, ELECT, G	4	C7,C8,C9,C10
Amp	640455-2	CONNECTOR ,MTA,SMD,R/A,2 PIN	2	J1,J2
Amp	640455-5	CONNECTOR MTA POST HEADER, 5PIN, RT ANGLE, POLARIZED, SM.	2	J3,J4
Johnson Comp	142-0751-821	CONNECTOR,SMA END,0.037 JOHNSON COMP	2	J5, J6
Various		SCREW, #4-40 PHILLIPS PAN HEAD, 1/4, SS	10	
Various		WASHER, #4 LOCK, SPLIT, S S	10	
Various		WASHER, #4 NARROW, .125 ID, .250 OD, .019 T, SS	10	
Rogers 4350, er=3.48, 30 mils thick, 1 oz Cu both sides		PCB's SDM-EVAL, INPUT and OUTPUT	2	
Wakefield	Die 10117	Heatsink - Extruded Aluminum, machined	1	

**Pin Descriptions**

Connector	Pin #	Function	Description
J1	1	Gnd	DC ground for D package module. Also connected to RF ground.
J1	2	V <sub>G1</sub>	Gate control. Sets the quiecent bias current for the top half of the SDM Module. Typical values 4.0 – 4.5Vdc.
J2	1	Gnd	DC ground for D package module. Also connected to RF ground.
J2	2	V <sub>G2</sub>	Gate control. Sets the quiecent bias current for the bottom half of the SDM Module. Typical values 4.0 – 4.5Vdc.
J3	1	Gnd	DC ground for D package module. Also connected to RF ground.
J3	2	Gnd	DC ground for D package module. Also connected to RF ground.
J3	3	Gnd	DC ground for D package module. Also connected to RF ground.
J3	4	V <sub>D1</sub>	Drain voltage for the top half of the SDM module. Nominally +28Vdc.
J3	5	V <sub>D1</sub>	Drain voltage for the top half of the SDM module. Nominally +28Vdc.
J4	1	Gnd	DC ground for D package module. Also connected to RF ground.
J4	2	Gnd	DC ground for D package module. Also connected to RF ground.
J4	3	Gnd	DC ground for D package module. Also connected to RF ground.
J4	4	V <sub>D2</sub>	Drain voltage for the bottom half of the SDM module. Nominally +28Vdc.
J4	5	V <sub>D2</sub>	Drain voltage for the bottom half of the SDM module. Nominally +28Vdc.
J5	Coax	RF in	RF input to test fixture (50 Ohm system)
J6	Coax	RF out	RF output to test fixture (50 Ohm system)

**Test Board Layouts**



**Heatsink Drawing**

