NanoRF Modules and Contacts

High Frequency Nanominiature Coax Contact with High Density
Modular Packaging, Designed for Extreme Rugged Environments

NanoRF Modules and Contacts

High Frequency Nanominiature Coax Contact with High Density Modular Packaging

LIGHTER WEIGHT

• Small contact size with higher RF contact density enables smaller packaging

• Aluminum modules available for weight reduction

MODULAR

• Blind-mateable float-mounted backplane contacts for module-to-module or box-to-box architecture

• Multiple cable types to fit application requirements - designed for .047 inch coax cable

RELIABLE

• Low loss and excellent isolation – optimized design for signal integrity

• TE tested to vibration requirements per VITA 72

INDUSTRIES

• Military Electronics

• C4ISR

• Electronic Warfare (EW)

APPLICATIONS

• Embedded Computing – VPX modules and Radar processing

Twice the Density of VITA 67 RF Modules

A higher density RF coax module, twice the density of VITA 67 SMPM RF modules used in VPX embedded computing applications. Half and full size module sizes can retain up to 12 or 18+ RF contacts, with options for customizing contact count and position. The daughtercard modules are mounted to the card in the VPX Plug-In module, and the backplane module into the chassis backplane.

The interface features a floating insert to pre-align RF contacts before engagement. Radial and axial contact float assures final alignment of the contacts and keeps the contacts fully engaged for excellent RF performance under harsh environments.

The contact design supports frequencies up to 70 GHz, and is designed to terminate to standard .047" semi-rigid and flexible cables. Additional cable options are to be released in 2019.

TE Components . . . TE Technology . . . TE Know-how . . .
AMP | AGASTAT | CII | HARTMAN | KILOVAC | MICRODOT | NANONICS | POLAMCO | Raychem
SEACON | Rochester | DEUTSCH

Empower Engineers to Solve Problems, Moving the World Forward.

MATERIALS

- Aluminum and stainless steel options for modules
- Copper alloy, 50 uin gold plating, PTFE dielectrics

ELECTRICAL

- Excellent RF performance through 60 GHz
- Isolation minimum 100 dB up through 27 GHz

MECHANICAL

- Supports as low as 0.110 inch contact pitch
- Fits in VPX systems packaging requirements
- 500 mating cycles durability
- Meets high vibration requirements of VITA 72

APPLICATION TOOLING

- No special tooling required

PRODUCT INFORMATION

Modules	Module Size	Material	Positions	Part No.
Backplane	Half Module	St Steel	8	2828434-1
	Half Module	Aluminum	8	2828434-2
	Half Module	St Steel	12	2313228-1
	Half Module	Aluminum	12	2313228-2
	Half module (V67.3D)	St Steel	12	2313376-1
	Half module (V67.3D)	Aluminum	12	2313376-2
	Full Module	St Steel	16	2828395-1
	Full Module	Aluminum	16	2828395-2
	Full Module	St Steel	18	2322337-1
	Full Module	Aluminum	18	2322337-2
Daughtercard	Half Module	St Steel	8	2828431-1
	Half Module	Aluminum	8	2828431-2
	Half Module	St Steel	12	2313225-1
	Half Module	Aluminum	12	2313225-2
	Full Module	St Steel	16	2828392-1
	Full Module	Aluminum	16	2828392-2
	Full Module	St Steel	18	2322335-1
	Full Module	Aluminum	18	2322335-2
Backplane Contact Kit				2302345-1
Daughtercard Contact Kit				2302339-1

Guide Blade

Guide Pins

Guide Blade

SMPM (current VITA 67)

Ø 4.98

NanoRF

Ø 2.34
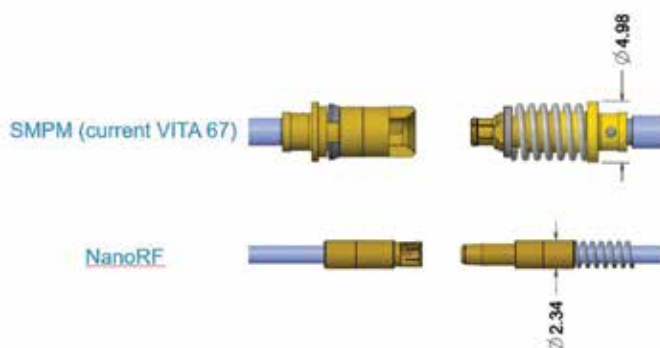
LET'S CONNECT

We make it easy to connect with our experts and are ready to provide all the support you need. Just call your local support number or visit te.com to chat with a Product Information Specialist.

Technical Support

te.com/support-center

North America	+1 800 522 6752	Asia Pacific	+86 400 820 6015
North America (Toll)	+1 717 986 7777	Japan	+81 044 844 8180
EMEA/South Africa	+800 0440 5100	Australia	+61 2 9554 2695
EMEA (Toll)	+31 73 624 6999	New Zealand	+64 (0) 9 634 4580
India (Toll-Free)	+800 440 5100		

te.com/nanoRF

TE connectivity