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Modelithics™ Models for Aeroflex/Inmet Components

Modelithics Global Models ™ reliably track how each component's performance will change with substrate characteristics, as illustrated in the Global Model data sheet for the component. Global Models automatically scale all substrate-sensitive parasitics with nominal part value, enabling a single model to generate accurate simulations of a complete component family. The data sheet also demonstrates the excellent measured-to-modeled agreement that can be expected using this model with the appropriate pads and substrate settings.

Global Models [™] are available for Agilent EEsof ADS, AWR Microwave Office, and Agilent GENESYS. The models listed below can be purchased individually, or as part of the Modelithics COMPLETE Library, CLR Library, SLC Library, or as part of a Pick 6, Pick 10, or Pick 20 Sub-Library.

To purchase Modelithics Library Models, or for more information, please contact: sales@modelithics.com or call 813.866.6335.

Aeroflex/Inmet Model Request - Complimentary (free) use available to qualified requestors.

For more information on Aeroflex/Inmet products or to request samples please contact Aeroflex/Inmet Sales.







Vendor Part Number	Modelithics Part Number	Device Type	Body Style	Global Part Values	Upr Validation Freq (GHz)	Example Data	Features*
ANC 50-100W	RES-AFE-50100W-002	Resistor	50x100	50 Ohms	30	S-Parameters	SS, PS
ANC 50-50W	RES-AFE-5050W-002	Resistor	50x50	50 Ohms	30	S-Parameters	SS, PS
NPC 20-40S	RES-AFE-2040S-001	Resistor	20x40	50 and 100 Ohms	30	S-Parameters	SS, PS, VS
NPC50-100W	RES-AFE-50100W-001	Resistor	50x100	50 and 100 Ohms	20	S-Parameters	SS, VS, PS
NPC50-50W	RES-AFE-5050W-001	Resistor	50x50	50 and 100 Ohms	20	S-Parameters	SS, VS, PS
€ PCA	ATTSP-AFE-PCA-001	Attenuator		1-20 dB	20	S-Parameters	SP
PCAA	ATTSP-AFE-PCAA-001	Attenuator		1-20 dB	20	S-Parameters	SP
PCAAF	ATT-AFE-PCAAF-001	Attenuator		1-20 dB	20	S-Parameters	SS, VS, PS
PCAF	ATT-AFE-PCAF-001	Attenuator		1-20 dB	18	S-Parameters	SS, VS, PS
PPC 100-200AW	RES-AFE-100200AW-001	Resistor	100x200	50 and 100 Ohms	12	S-Parameters	SS, PS, VS

- BB Broad Band Capacitor FL Flicker Noise (1/F) IM 3rd order IMD validated LP Load Pull NL Non-Linear
- NP Noise Parameter PD Pad de-embedding OS Orientation Selectable PS Pad Scaling SS Substrate Scalable
- TS Temperature Scalable VS Part Value Scalable/Selectable
- BW Bondwire de-embedding SP S-Parameter Data Model XP X-Parameter model







Modelithics™ Models for Aeroflex/Metelics Components

Modelithics high accuracy measurement-based models reliably track how component performance will change with various input parameters over a specified frequency range documented in a model information data sheet for each component. Modelithics surface-mount diode models covers varactor, Schottky and PIN diodes of different capacitance ranges and package sizes.

The equivalent circuit models are extracted from precision DC-IV, capacitance and S-parameter measurements. The models also include features such as substrate scaling, and are validated over temperature and RF input power. Shown on this page are specific Aeroflex/Metelics diode models developed for the benefit of designers seeking improved simulation accuracy and more rapid design success.

The models listed below can be purchased individually or as part of the complete Modelithics NLD non-linear diode model library.

Model Download and Quotation Request - Complimentary (free) use available to qualified requestors.







Vendor Part Number	Modelithics Part Number	Device Type	Body Style	Global Part Values	Upr Validation Freq (GHz)	Example Data	Features*
MLP7100	PIN-MIM-VARP-001	Pin	Chip or CS19-1		10	S-Parameters	NL, TS
MLP7101	PIN-MIM-VARP-004	Pin	Chip		10	S-Parameters	NL, TS
MLP7110	PIN-MIM-VARP-002	Pin	Chip or CS19-1		10	S-Parameters	NL, TS
MLP7120	PIN-MIM-VARP-003	Pin	Chip or CS19-1		10	S-Parameters	NL, TS
MMP7065-11	PIN-MIM-MMP-101	PIN	Chip		20		NL, TS
MMP7065-11	PIN-MIM-MMP-001	PIN	Chip		20		NL, TS
MSD710	SRD-AFE-E25-001	SRD	E25		6		NL, SS
MSSP25250-70	PIN-MIM-0603-001	PIN	0603		14		NL

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Piconics is a world-class supplier of high-quality microelectronic coil inductors for a wide variety of applications in the space, military, telecom, test & measurement and medical electronics industries. Piconics specializes in miniature MIL-Spec grade inductors along with tight tolerance, fine awg windings such as the Broad-band Conical and Microwave Air Coil Inductors. Piconics keeps the innovative spirit alive by continuing to work with industry leaders in microelectronics to provide inductor solutions to the most challenging problems. The Engineering team at Piconics continues the philosophy of promoting and innovating high-quality microelectronic inductors for the industries most cutting edge applications. Piconics is an ISO 9001:2008 certified company with all manufacturing taking place in Tyngsboro, MA USA.

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Complimentary (free) use available to qualified requestors.







Vendor Part Number	Modelithics Part Number	Device Type	Body Style	Global Part Values	Upr Validation Freq (GHz)	Example Data	Features*
CCxxxTxxK240G5-C	IND-PIC-CONE-SHNT-001	Inductor	SMT Conical	0.22-8 uH	65	S-Parameters	BB, VS
CCxxxTxxK240G5-C	IND-PIC-CONE-SERS-001	Inductor	SMT Conical	0.22-8 uH	50		BB, SS, VS
CCxxxTxxK240G5-C	IND-PIC-CONE-SHNT-101	Inductor	SMT Conical	0.22-8 uH	40		BB, VS

- BB Broad Band Capacitor FL Flicker Noise (1/F) IM 3rd order IMD validated LP Load Pull NL Non-Linear
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Free sample Presidio models are available below for use with Agilent EEsof Advanced Design System (ADS), AWR Microwave Office (MWO), Ansoft Designer, and Eagleware-Elanix (GENESYS).

Modelithics Global Models™ reliably track how the performance of the components will change with substrate characteristics, as illustrated in the data sheet below, which also demonstrates the good measured to modeled agreement that can be expected when using this model with the appropriate pads and substrate settings.

Request Samples from Presidio.

Download a FREE BB0502 model specifically applicable to use on a 10 mil quartz substrate and validated to 50 GHz - * Now part of Modelithics Select free sample library available from Modelithics "Free Tools" page. Note: a substrate-scalable model for the BB0502 is also available as part of the Modelithics CLR Library.

Presidio Model Download Request - Complimentary (free) use available to qualified requestors.







Vendor Part Number	Modelithics Part Number	Device Type	Body Style	Global Part Values	Upr Validation Freq (GHz)	Example Data	Features*
BB0502X7R104M	CAP-PRS-0502-001	Capacitor	0502	100 nF	50		BB, SS
BB0502X7R104M	CAP-PRS-0502-001-S	Capacitor	0502	DC Block	50		BB
MVP 0505	CAP-PRS-0505-001	Capacitor	0505	0.33-250 pF	20		SS,VS

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All Modelithics MVP Connections

Aeroflex/Inmet

Aeroflex/Metelics

American Technical Ceramics Corp.

Avago

AVX

AWR Microwave Office

Barry Industries

CEL

Chilisin

Coilcraft

Dielectric Laboratories, Inc

Florida RF Labs/EMC Technology

GOWANDA

Johanson Technology

KEMET

Keysight ADS

Keysight Genesys

KOA

M/A-COM Technology Solutions

MDT

Mini-Circuits

Murata

NEC

Nitronex Corp.

Nuhertz

Passive Plus

Piconics

Presidio Components

RJR Polymers, Inc.

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Syfer

Taiyo Yuden

TDK

Temex-Ceramics

TriQuint Semiconductor

Virginia Diodes, Inc.