

# M/A-COM Technology Solutions Announces C- Band Additions to Family of Digital Phase Shifters

## Phase Shifters Deliver Fast Switching Speed, Low Phase Error, and Serial or Parallel Control Capability

**Lowell, MA, April 27, 2012** - M/A-COM Technology Solutions Inc. (M/A-COM Tech), a leading supplier of high performance analog semiconductor solutions, introduced today two new additions to its family of digital phase shifters for radar, communication, and electronic warfare (EW) applications.

The phase shifters facilitate easy implementation in communication antennas, phased array radars, weather radars, and EW receivers. The 3.5 GHz to 6.0 GHz GaAs pHEMT 4-Bit and 6-Bit digital phase shifters meet the high performance requirements of communications and radar system manufacturers, optimizing for fast switching speed, low phase error, and serial or parallel control capability.



"These new C-Band phase shifters are designed for low and constant phase error over a

wide frequency range," said Kevin Harrington, Product Manager. "The low RMS phase noise error and options for 4-Bit and 6-Bit serial or parallel control provide our customers maximum flexibility."

The <u>MAPS-010145</u> is a 4-Bit digital phase shifter housed in a 4mm 24-Lead PQFN Package. It provides 360° phase shift range with a step size of 22.5°. It is controlled with a single +5.0V serial or parallel control line. Its insertion loss is 5.0dB, with a low +/-1.0dB attenuation variation and +/- 2.5° phase accuracy over the 3.5 GHz to 6.0 GHz frequency range.

The <u>MAPS-010165</u> is a 6-Bit digital phase shifter housed in a 4mm 24-Lead PQFN Package. It provides 360° phase shift range with a step size of 5.625°. It is controlled with a single +5.0V serial or parallel control line. Its insertion loss is 5.0dB, with a low +/- 0.8dB attenuation variation and +/- 5.2° phase accuracy over the 3.5 GHz to 6.0 GHz frequency range.

The table below outlines typical performance:

		MAPS-010145	MAPS-010165
Parameters	Units	Тур	Тур
Insertion Loss (any phase)	dB	5.0	5.5
Attenuation Variation	dB	+/- 1.0	+/- 0.8
Phase Accuracy	deg	+/- 2.5	+/- 5.2
RMS Attenuation Error	dB	0.4	0.4
RMS Phase Error	deg	3.0	4.0
Input IP3	dBm	45	40
Package		4mm 24-Lead PQFN	4mm 24-Lead PQFN

Production quantities and samples of <u>MAPS-010145</u> and <u>MAPS-010165</u> are available from stock. Final datasheets and additional product information can be obtained from the M/A-COM Tech website at: <u>www.macomtech.com</u>

#### ABOUT M/A-COM TECHNOLOGY SOLUTIONS INC.

M/A-COM Technology Solutions (<u>www.macomtech.com</u>) is a leading supplier of high performance analog semiconductor solutions for use in radio frequency (RF), microwave, and millimeter wave applications. Recognized for its broad portfolio of products, M/A-COM Tech serves diverse markets, including CATV, wireless infrastructure, optical communications, aerospace and defense, automotive, industrial, medical, and mobile devices. M/A-COM Tech builds on more than 60 years of experience designing and manufacturing innovative product solutions for customers worldwide.

Headquartered in Lowell, Massachusetts, M/A-COM Tech is certified to the ISO9001 international quality standard and

ISO14001 environmental management standard. M/A-COM Tech has design centers and sales offices throughout North America, Europe, Asia and Australia.

### FOR SALES INFORMATION, PLEASE CONTACT:

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