



## **Global Communication Semiconductors, Inc.**

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### **GCS to Showcase THz Diode Foundry Process at IEEE IMS 2010.**

Global Communication Semiconductors, Inc., a global leader in GaAs and InP pure-play foundry services, today announced the showcase of its new THz Diode foundry process at the IEEE International Microwave Symposium 2010, May 24-28, in Anaheim, California.

The planar Schottky diode process features cutoff frequency ( $f_{co}$ ) > 1THz with an ideality factor of 1.1. The low diode turn-on voltage (<500mv) allows mixer operation with a LO power below 10 dBm and a conversion loss of 6.5 dB at W-band.

Unlike other THz diode, GCS' process can be integrated with other passive components, such as MIM caps, spiral inductors, thin film resistors and transmission lines to realize diplexers and filters monolithically. The monolithic integration eliminates unwanted parasitic elements from wire bond, which is highly undesirable at mmW frequencies.

For microwave frequency transceiver components, this THz diode is ideal for low conversion loss mixers, with options to be monolithically integrated with HBT circuits (LO and linear PA) and HEMT circuits (LNA, switch, and PA).

At IMS 2010, GCS will showcase its new diode foundry process and its complete HBT and PHEMT process portfolio.

For further information, please contact us:

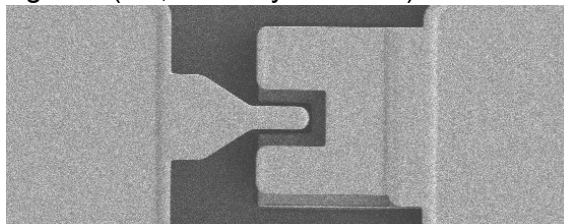
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GCS' Planar THz Schottky Diode