

# Texas Instruments

## Microwave Military Components

### TGM8014 Carrier Plate Assembly

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#### Product Features

- 0.6-watt average output power at 1-dB gain compression
- 6 to 18 GHz bandwidth
- Automated assembly
- Selectable gate biasing
- 100% RF screening

#### Product Description

The TGM8014 integrates two Texas Instruments TGA8014 MMIC amplifiers in a balanced configuration on a single carrier plate assembly. An alumina thin-film network contains the Lange couplers and all necessary external bias circuitry. Adjustable voltage dividers on the thin-film network optimize gate bias for each MMIC. The TGM8014 can be used in a variety of wideband driver and power amplifier applications.

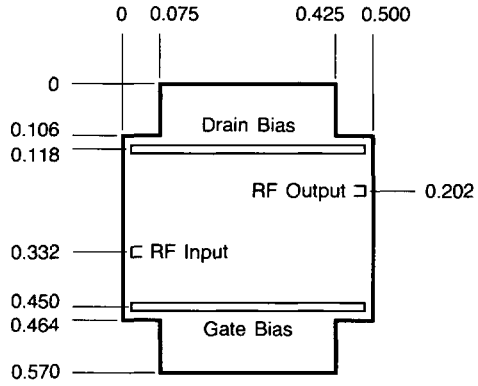
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#### Typical Performance ( $V^+ = 8\text{ V}$ , $V^- = -1.5\text{ V}$ , $T_A = 25^\circ\text{C}$ )

Parameter	Symbol	Test Conditions	Value	Units
Average Output Power at 1-dB Gain Compression	$P_{1dB}$	6-18 GHz	28	dBm
Average Small-Signal Gain	$ S_{21} $	6-18 GHz	6	dB
Maximum Input/Output Standing-Wave Ratio	SWR	6-18 GHz	3:1	
Positive Supply Current	$I^+$		650	mA

This document contains information on new products in the sampling or preproduction phase of development. Characteristic data and other specifications are subject to change without notice.

**Outline Drawing**



**Units:** inches

**Thickness:** 0.037 (Referenced to top of thin-film network)