

**Preliminary**
**5 W GaAs PA PCB Module for 5.8 GHz Application**
**FEATURES**

- 32 dB Typical Power Gain at 5.8 GHz
- 36 dBm Power at 5.8 GHz
- Suitable for 5.8 GHz Applications
- 100 % DC and RF Tested

**DESCRIPTION**

The TMP057-059-32-36 is a fully matched power amplifier PCB module with excellent performances and high circuit integration for 5.8 GHz applications. It offers high power performance, excellent linearity and low cost. The module is a two-stage amplifier module using Transcom's own proprietary PHEMT devices that provide outstanding linearity and gain performance. The RF input and output of this module are fully matched for 50 ohm operation.

**ELECTRICAL SPECIFICATIONS (Case Temp. = +25° C)**

| Symbol           | CONDITIONS                                                                               | MIN | TYP | MAX | UNIT |
|------------------|------------------------------------------------------------------------------------------|-----|-----|-----|------|
| FREQ             | Frequency Range                                                                          | 5.7 | 5.8 | 5.9 | GHz  |
| Pout             | 1dB Compression Output Power                                                             | 35  | 36  |     | dBm  |
| G <sub>L</sub>   | Linear Power Gain                                                                        | 30  | 32  |     | dB   |
| IP3              | Intercept Point of the 3 <sup>rd</sup> -order Intermodulation *P <sub>SCL</sub> = 20 dBm |     | 46  |     | dBm  |
| V <sub>ds</sub>  | Supply Voltage                                                                           |     | 10  |     | Volt |
| V <sub>g</sub>   | Gate Voltage                                                                             |     | -5  |     | Volt |
| I <sub>dsq</sub> | DC Quiescent Current (RF OFF)                                                            |     | 1.7 |     | A    |
| OT               | Operation Temperature                                                                    | -40 |     | 70  | °C   |

**Note :**

\* P<sub>SCL</sub>: Output Power of Single Carrier Level.