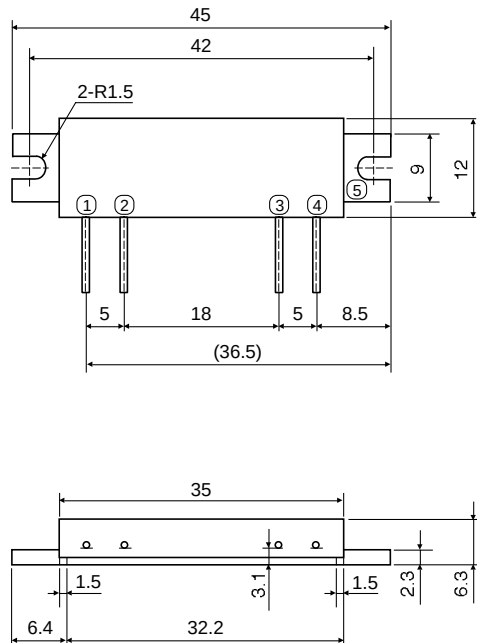


SILICON MOS FET POWER AMPLIFIER, 889-915MHz, 3.8W, FM PORTABLE RADIO

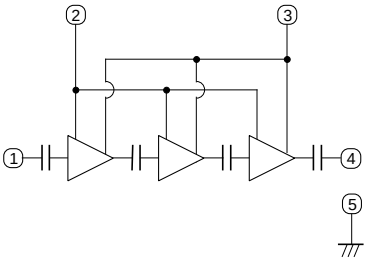
OUTLINE DRAWING

Dimensions in mm



H50

BLOCK DIAGRAM



PIN:  
①Pin : RF INPUT  
②VGG : GATE BIAS SUPPLY  
③VDD : DRAIN BIAS SUPPLY  
④PO : RF OUTPUT  
⑤GND: FIN

ABSOLUTE MAXIMUM RATINGS (Tc=25°C unless otherwise noted)

| Symbol  | Parameter                  | Conditions              | Ratings     | Unit |
|---------|----------------------------|-------------------------|-------------|------|
| VDD     | Supply voltage             | ZG=ZL=50W               | 9           | V    |
| VGG     | Gate bias voltage          |                         | 5.5         | V    |
| Pin     | Input power                | f=889-915MHz, ZG=ZL=50W | 6           | mW   |
| Po      | Output power               | f=889-915MHz, ZG=ZL=50W | 6           | W    |
| Tc (OP) | Operation case temperature | f=889-915MHz, ZG=ZL=50W | -30 to +100 | °C   |
| Tstg    | Storage temperature        |                         | -40 to +100 | °C   |

Note. Above parameters are guaranteed independently.

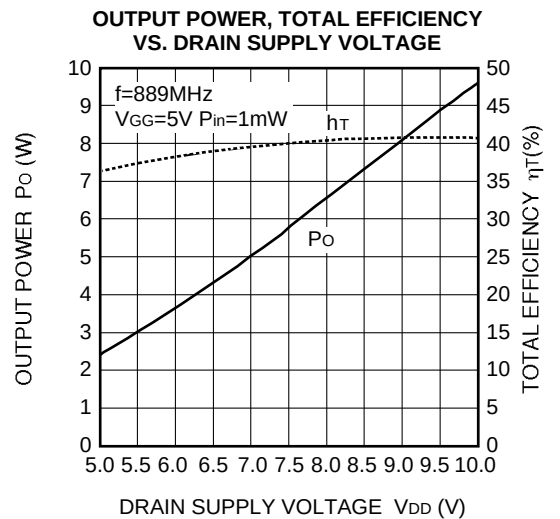
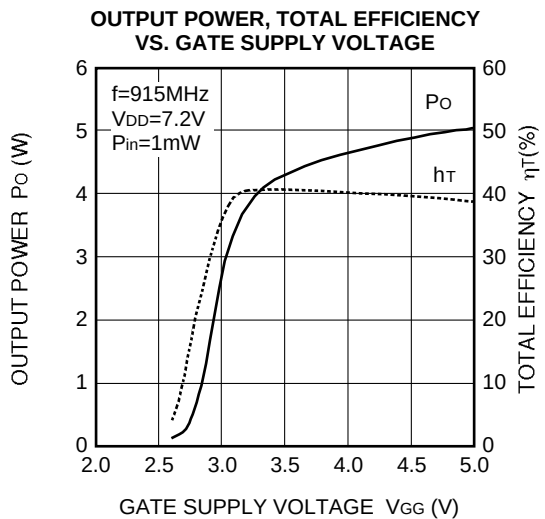
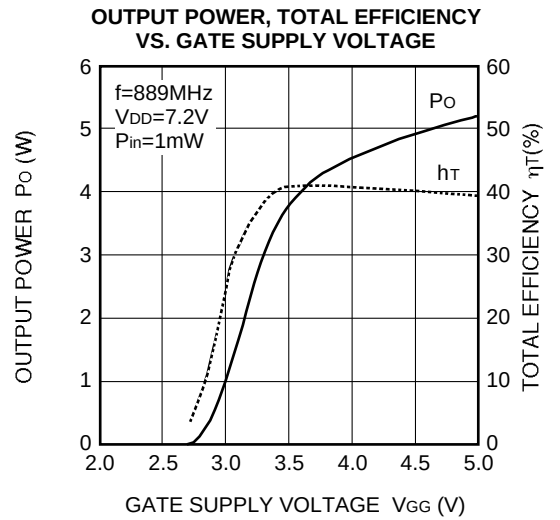
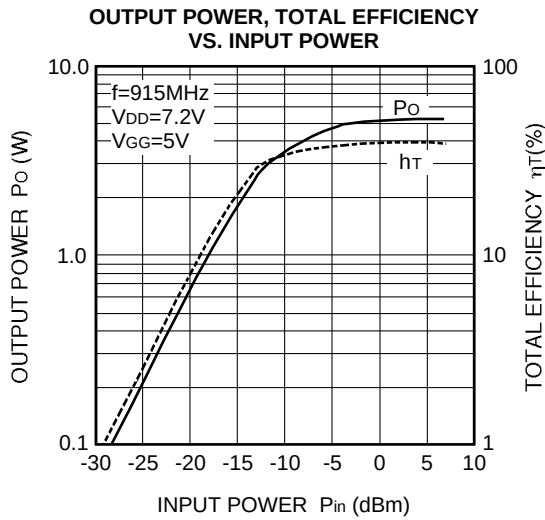
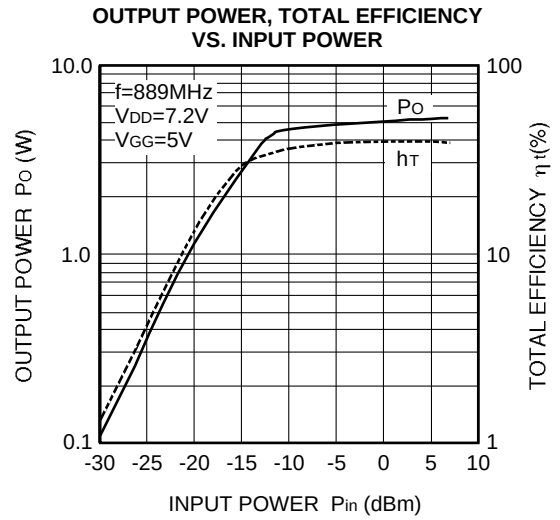
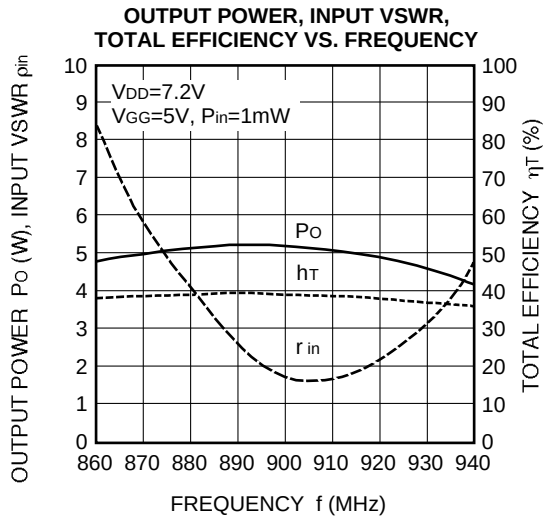
ELECTRICAL CHARACTERISTICS (Tc=25°C, ZG=ZL=50W unless otherwise noted)

| Symbol | Parameter           | Test conditions                                   | Limits                    |     | Unit |
|--------|---------------------|---------------------------------------------------|---------------------------|-----|------|
|        |                     |                                                   | Min                       | Max |      |
| f      | Frequency range     |                                                   | 889                       | 915 | MHz  |
| Po     | Output power        | VDD=7.2V, VGG=5V, Pin=1mW, ZG=ZL=50W              | 3.8                       | -   | W    |
| 2fo    | 2nd. harmonic       |                                                   |                           | -30 | dBc  |
| r in   | Input VSWR          |                                                   |                           | 4   | -    |
| hT     | Total efficiency    | PO=3.8W(VGG=Adjust), VDD=7.2V, Pin=1mW, ZG=ZL=50W | 30                        |     | %    |
| -      | Stability           | ZG=ZL=50W, VDD=5-7.2V, Load VSWR <4:1             | No parasitic oscillation  |     | -    |
| -      | Load VSWR tolerance | VDD=9V, Pin=1mW, PO=3.8W (VGG Adjust), ZL=20:1    | No degradation or destroy |     | -    |

Note. Above parameters, ratings, limits and test conditions are subject to change.

SILICON MOS FET POWER AMPLIFIER, 889-915MHz, 3.8W, FM PORTABLE RADIO

TYPICAL PERFORMANCE DATA



SILICON MOS FET POWER AMPLIFIER, 889-915MHz, 3.8W, FM PORTABLE RADIO

