

VHF POWER MOSFET

N-Channel Enhancement Mode

DESCRIPTION:

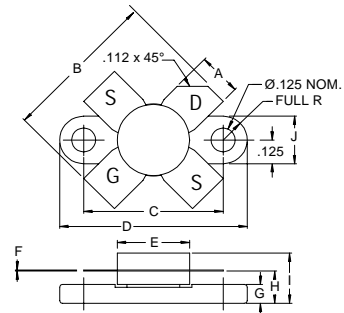
The **VFT15-28** is a gold metallized N-Channel Enhancement mode MOSFET, intended for use in 28 VDC large signal applications to 400 MHz.

FEATURES:

- $P_G = 13$ dB Typ. at 15 W /175MHz
- **Omnigold™** Metalization System
- Class A or AB
- 2-400 MHz operation

MAXIMUM RATINGS

| | |
|---------------|----------------------|
| I_D | 2.5 A |
| $V_{(BR)DSS}$ | 65 V |
| V_{DGR} | 65 V |
| V_{GS} | ± 40 V |
| P_{DISS} | 55 W @ $T_C = 25$ °C |
| T_J | -65 °C to +200 °C |
| T_{STG} | -65 °C to +150 °C |
| θ_{JC} | 3.2 °C/W |

PACKAGE STYLE .380 4L FLG


| DIM | MINIMUM inches / mm | MAXIMUM inches / mm |
|-----|------------------------|------------------------|
| A | .220 / 5.59 | .230 / 5.84 |
| B | .785 / 19.94 | |
| C | .720 / 18.29 | .730 / 18.54 |
| D | .970 / 24.64 | .980 / 24.89 |
| E | | .385 / 9.78 |
| F | .004 / 0.10 | .006 / 0.15 |
| G | .085 / 2.16 | .105 / 2.67 |
| H | .160 / 4.06 | .180 / 4.57 |
| I | | .280 / 7.11 |
| J | .240 / 6.10 | .255 / 6.48 |

ORDER CODE: ASI10702
CHARACTERISTICS $T_C = 25$ °C

| SYMBOL | TEST CONDITIONS | | MINIMUM | TYPICAL | MAXIMUM | UNITS |
|---------------|-----------------|-------------------|---------------|---------|---------|---------|
| $V_{(BR)DSS}$ | $V_{GS} = 0$ V | $I_{DS} = 5.0$ mA | 60 | --- | --- | V |
| I_{DSS} | $V_{DS} = 28$ V | $V_{GS} = 0$ V | --- | --- | 2.0 | mA |
| I_{GSS} | $V_{DS} = 0$ V | $V_{GS} = 40$ V | --- | --- | 1.0 | μ A |
| V_{GS} | $V_{DS} = 10$ V | $I_D = 25$ mA | 1.0 | --- | 6.0 | V |
| G_{FS} | $V_{DS} = 10$ V | $I_D = 250$ mA | 0.25 | --- | --- | mho |
| C_{iss} | $V_{DS} = 28$ V | $V_{GS} = 0$ V | $f = 1.0$ MHz | 21.5 | | pF |
| C_{oss} | | | | 16.5 | | |
| C_{rss} | | | | 2.7 | | |

CHARACTERISTICS $T_C = 25\text{ }^\circ\text{C}$

| SYMBOL | TEST CONDITIONS | | | MINIMUM | TYPICAL | MAXIMUM | UNITS |
|----------|------------------------|-------------------------|-------------------------|---------|---------|---------|-----------|
| P_G | $V_{DD} = 28\text{ V}$ | $I_{DQ} = 25\text{ mA}$ | $P_{OUT} = 15\text{ W}$ | 13 | 14 | | dB |
| η_D | $F = 175\text{ MHz}$ | | | 50 | 60 | | % |

Power Out vs Power In

