

# UHF POWER MOSFET

## N-Channel Enhancement Mode

**DESCRIPTION:**

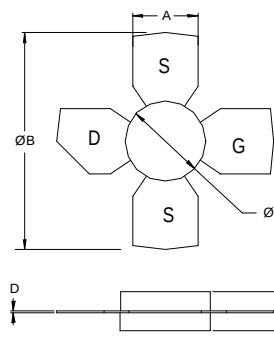
The **UFT5-28SL** is Designed for is  
Designed for AM/FM Power Amplifier  
Applications up to 500 MHz.

**FEATURES:**

- $P_{OUT} = 5.0 \text{ W}$  Typical at 400 MHz
- $\eta_D = 55\%$  Typical at 5 W / 400 MHz
- **Omnigold™** Metalization System

**MAXIMUM RATINGS**

|               |                                             |
|---------------|---------------------------------------------|
| $I_D$         | 1.25 A                                      |
| $V_{DSS}$     | 60 V                                        |
| $V_{DGR}$     | 60 V                                        |
| $V_{GS}$      | $\pm 40 \text{ V}$                          |
| $P_{DISS}$    | 17.5 W @ $T_C = 25^\circ\text{C}$           |
| $T_J$         | $-65^\circ\text{C}$ to $+150^\circ\text{C}$ |
| $T_{STG}$     | $-65^\circ\text{C}$ to $+150^\circ\text{C}$ |
| $\theta_{JC}$ | $10^\circ\text{C/W}$                        |

**PACKAGE STYLE .280 4L PILL**


| DIM | MINIMUM<br>inches / mm | MAXIMUM<br>inches / mm |
|-----|------------------------|------------------------|
| A   | .220 / 5.59            | .230 / 5.84            |
| B   |                        | 1.055 / 26.80          |
| C   | .275 / 6.99            | .285 / 7.24            |
| D   | .004 / 0.10            | .006 / 0.15            |
| E   | .050 / 1.27            | .060 / 1.52            |
| F   | .118 / 3.00            | .130 / 3.30            |

**ORDER CODE: ASI10664**
**CHARACTERISTICS**  $T_C = 25^\circ\text{C}$ 

| SYMBOL                              | TEST CONDITIONS                                  |                                                     | MINIMUM  | TYPICAL           | MAXIMUM | UNITS         |
|-------------------------------------|--------------------------------------------------|-----------------------------------------------------|----------|-------------------|---------|---------------|
| $V_{(BR)DSS}$                       | $I_{DS} = 5 \text{ mA}$                          | $V_{GS} = 0 \text{ V}$                              | 60       |                   |         | V             |
| $I_{DSS}$                           | $V_{DS} = 28 \text{ V}$                          | $V_{GS} = 0 \text{ V}$                              |          |                   | 0.8     | mA            |
| $I_{GSS}$                           | $V_{GS} = 20 \text{ V}$                          | $V_{DS} = 0 \text{ V}$                              |          |                   | 1.0     | $\mu\text{A}$ |
| $G_{FS}$                            | $V_{GS} = 10 \text{ V}$                          | $I_D = 250 \text{ mA}$                              | .110     |                   |         | mS            |
| $V_{GS(TH)}$                        | $V_{DS} = 10 \text{ V}$                          | $I_D = 10 \text{ mA}$                               | 1.0      |                   | 6.0     | V             |
| $C_{ISS}$<br>$C_{OSS}$<br>$C_{RSS}$ | $V_{DS} = 0 \text{ V}$                           | $V_{GS} = 0 \text{ V}$                              |          | 8.0<br>6.5<br>5.5 |         | pF            |
| $P_G$<br>$\eta_D$                   | $V_{DD} = 28 \text{ V}$<br>$f = 400 \text{ MHz}$ | $I_{DQ} = 50 \text{ mA}$<br>$P_{OUT} = 4 \text{ W}$ | 14<br>50 | 16<br>55          |         | dB<br>%       |