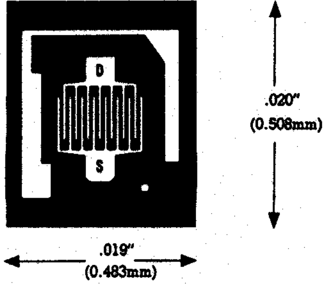
# N-CHANNEL JUNCTION FET

Solitron Devices, Inc.

## CHIP NUMBER FN71.1




Die Size: 19 x 20 (mils)
0.483 x 0.508(mm)
Pad Size: 3 x 3 (mils)
0.076 x 0.076(mm)
GATE-SUBSTRATE

### CONTACT METALLIZATION

Top Contact: > 12,000 Å Aluminum

Backside Contact: 3,000 Å Gold

### ASSEMBLY RECOMMENDATIONS

It is advisable that:

a) the die be eutectically mounted with gold silicon preform 98/2%.

b) 1 mil (0.0254mm) aluminum wire be ultrasonically attached to the top contact.

## TYPICAL ELECTRICAL CHARACTERISTICS

| PARAMETER | MIN. | TYP | MAX. | UNIT | TEST CONDITIONS |
|---|---|---|---|---|---|
| $BV_{GSS}$ | -20 | -30 | -40 | V | $V_{DS}$ = 0, $I_G$ = 1μA |
| $I_{DSS}$ | 10 | 30 | 60 | mA | $V_{DS}$ = 10V, $I_G$ = 1μA |
| $g_{fs}$ | | 15 | 20 | mmho | $V_{DS}$ = 10V, $I_D$, = 10mA, f = 1KHz |
| $I_{GSS}$ | | 40 | 150 | pA | $V_{GS}$ = -15V, $V_{DS}$ = 0 |
| $V_{GS}$ | - 1 | -5 | - 8V | V | $V_D$ = 10V, $I_D$ = 1nA |
| NF | | | 1.5 | dB | $V_{DS}$ = 10V, $I_D$ = 10mA, f = 100MHz |
| $C_{gd}$ | | 1.8 | 2.5 | pF | $V_{DS}$ = 10V, $I_D$ = 10mA, f = 1MHz |
| $C_{gs}$ | | 4.0 | 5.0 | pF | $V_{DS}$ = 10V, $I_D$ = 10mA, f = 1MHz |
| $\bar{e}_n$ | | 10 | 20 | nV/√Hz | $V_{DS}$ = 10V, $I_D$ = 10mA, f = 100Hz |

TYPICAL DEVICE TYPES: U308 - U311

CHIP TYPE FN71.1