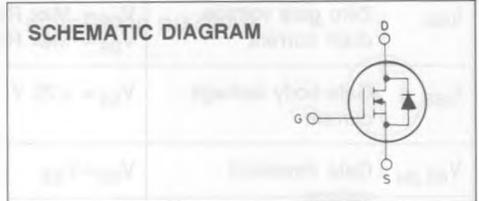


## N - CHANNEL ENHANCEMENT MODE POWER MOS TRANSISTOR IN DIE FORM

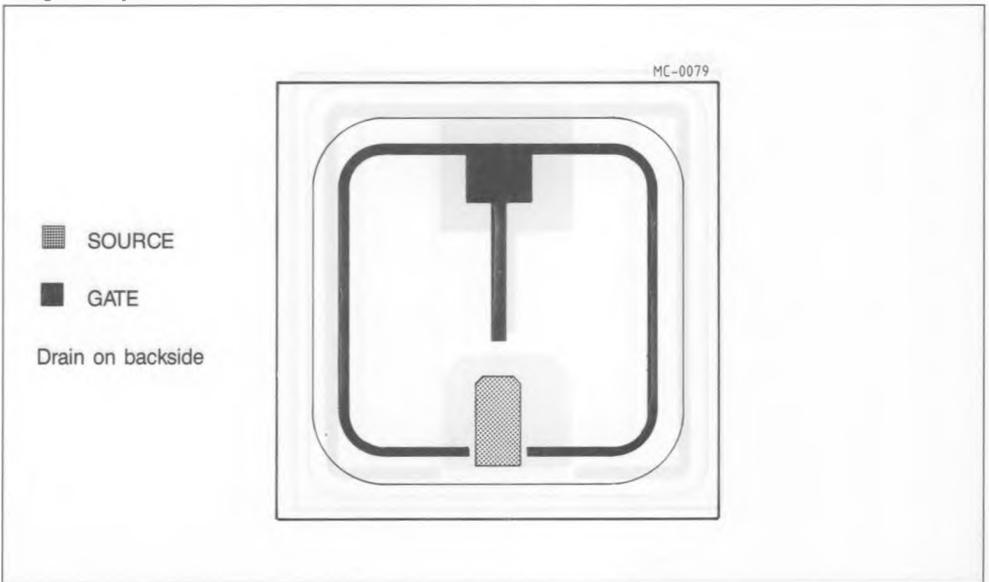
- DIE SIZE: 52 × 53 mils
- METALLIZATION:
  - Top Al
  - Back Au/Cr/Ni/Au
- BACKSIDE THICKNESS: 6100 Å
- DIE THICKNESS: 16 ± 2 mils
- PASSIVATION: P-Vapox
- BONDING PAD SIZE:
  - Source 10 × 5 mils
  - Gate 5 × 6 mils
- RECOMMENDED WIRE BONDING:
  - Source Au - max 2 mils
  - Gate Au - max 2 mils



| $V_{DSS}$ | $R_{DS(on)}$ | $I_D^*$ |
|-----------|--------------|---------|
| 400 V     | 20 $\Omega$  | 0.6 A   |

N-channel enhancement mode POWER MOS field effect transistor. Easy drive and very fast switching times make this POWER MOS ideal for high speed switching applications.

### Die geometry



\* With  $R_{thjc}$  max. 6.8°C/W

GUARANTEED PROBED ELECTRICAL CHARACTERISTICS ( $T_j = 25^\circ\text{C}$ , Note 1)

| Parameters    |                                   | Test Conditions                                                         |                           | Min. | Typ. | Max.        | Unit                           |
|---------------|-----------------------------------|-------------------------------------------------------------------------|---------------------------|------|------|-------------|--------------------------------|
| $V_{(BR)DSS}$ | Drain-source breakdown voltage    | $I_D = 250 \mu\text{A}$                                                 | $V_{GS} = 0$              | 400  |      |             | V                              |
| $I_{DSS}$     | Zero gate voltage drain current   | $V_{DS} = \text{Max Rating}$<br>$V_{DS} = \text{Max Rating} \times 0.8$ | $T_j = 125^\circ\text{C}$ |      |      | 250<br>1000 | $\mu\text{A}$<br>$\mu\text{A}$ |
| $I_{GSS}$     | Gate-body leakage current         | $V_{GS} = \pm 20 \text{ V}$                                             |                           |      |      | $\pm 100$   | nA                             |
| $V_{GS(th)}$  | Gate threshold voltage            | $V_{DS} = V_{GS}$                                                       | $I_D = 250 \mu\text{A}$   | 2    |      | 4           | V                              |
| $R_{DS(on)}$  | Static drain-source on resistance | $V_{GS} = 10 \text{ V}$                                                 | $I_D = 0.3 \text{ A}$     |      |      | 20          | $\Omega$                       |

NOTES: 1 - Due to probe testing limitations dc parameters only are tested. They are measured using pulse techniques: pulse width  $< 300 \mu\text{s}$ , duty cycle  $< 2\%$

2 - For detailed device characteristics please refer to the discrete device datasheet