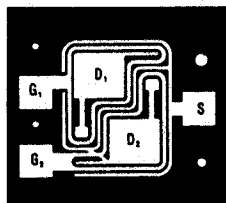


### CHIP NUMBER

# DFMP1



.026"  
(0.660mm)

.035"  
(0.889mm)

Die Size: 26 x 35 (mils)  
0.660 x 0.889(mm)  
4 x 4 (mils)  
Pad Size: 0.102 x 0.102(mm)  
BODY-SUBSTRATE

### CONTACT METALLIZATION

Top Contact: > 12,000  
Å Aluminum

Backside Contact: 3,000 Å Gold

### ASSEMBLY RECOMMENDATIONS

It is advisable that:

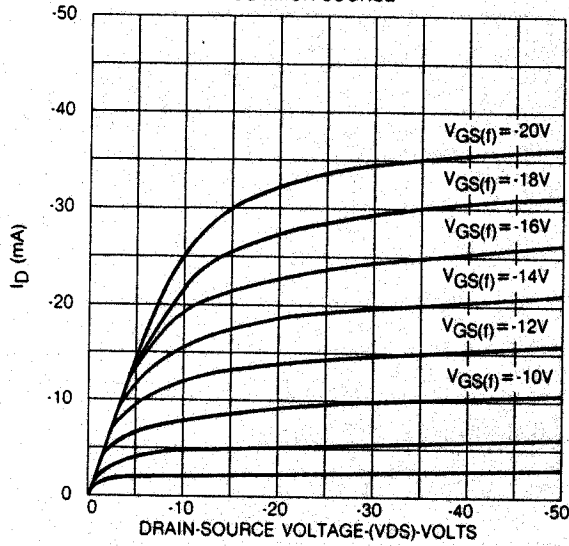
- the die be eutectically mounted with gold silicon preform 98/2%.
- 1 mil (0.0254mm) aluminum wire be ultrasonically attached to the top contact.

## TYPICAL ELECTRICAL CHARACTERISTICS

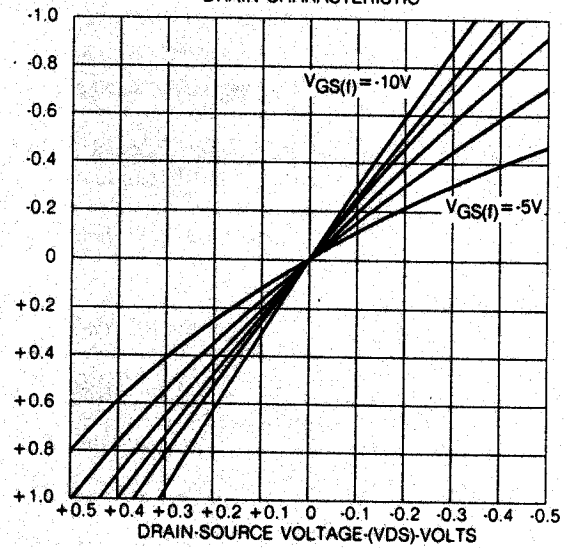
| PARAMETER | MIN. | TYP | MAX. | UNIT   | TEST CONDITIONS                  |
|-----------|------|-----|------|--------|----------------------------------|
| BVDSS     | -35  |     |      | V      | VGS = 0, ID = 10μA               |
| IDSS      |      | 10  | 400  | pA     | VGS = 0, VDS = -20V              |
| gfs       | 1500 |     | 3000 | μmho   | VDS = -15V, ID = -10mA, f = 1KHz |
| IGSS      |      | 0.1 | 10   | pA     | VGS = -40, VDS = 0               |
| DVGS      |      | 20  | 200  | mV     | VDS = -15V, ID = -500μA          |
| VGS       | -2.0 |     |      | V      | VDS = -15V, ID = -10μA           |
| Crss      |      | 0.4 | 0.7  | pF     | VDS = -15V, ID = -10mA, f = 1MHz |
| Ciss      |      | 2.0 | 3.0  | pF     | VDS = -15V, ID = -10mA, f = 1MHz |
| Ciss      |      | 2.0 | 3.0  | pF     | VDS = -15V, ID = -10mA, f = 1MHz |
| en        |      | 50  |      | nV/√Hz | VDS = -15V, ID = -1mA, f = 1KHz  |

TYPICAL DEVICE TYPES: 3N165, 3N166

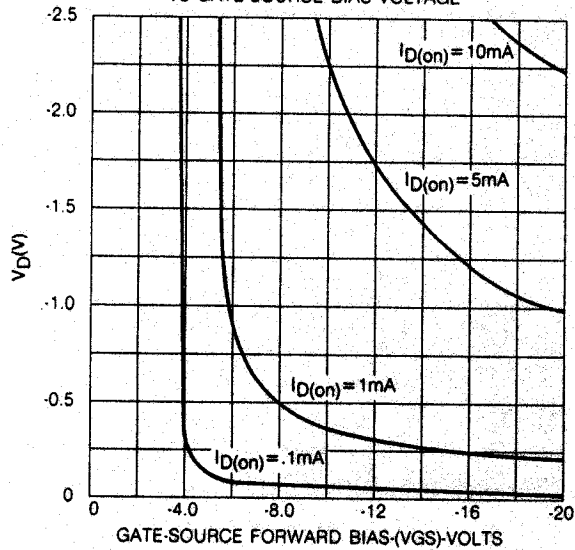
**DRAIN CHARACTERISTIC  
COMMON-SOURCE**



**LOW LEVEL  
DRAIN CHARACTERISTIC**



**LOW-LEVEL "ON" DRAIN-SOURCE VOLTAGE  
VS GATE-SOURCE BIAS VOLTAGE**



**STATIC DRAIN-SOURCE ON RESISTANCE  
VS GATE-SOURCE BIAS**

