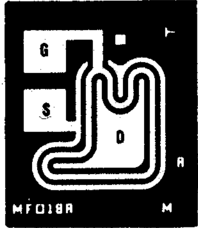
Solitron Devices, Inc.

N-CHANNEL ENHANCEMENT MOS FET

CHIP NUMBER FMN1.2



.023" (0.584mm)

.021" (0.533mm)

Die Size: 21 x 23 (mils)
0.533 x 0.584(mm)
Pad Size 4 x 4 (mils)
BODY-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_{DSS}	20	33		V	I_D = 1.0μA, V_{GS} = 0, V_{BS} = 0
I_{DSS}		.01	10	nA	V_{DS} = 10V, V_{GS} = 0, V_{BS} = 0
I_{GSS}		0.2	5	pA	V_{GB} = ±25V, V_{DB}, = U_{SB} = 0
V_{TH}	0.1	1.0	2.5	V	V_{DS} = V_{GS} = V_{TH}, I_D = 1μA
gfs	8.0	10		ms	V_{DS} = 10V, I_D = 20mA, f = 1KHz
R_{DS}		70	100	Ω	I_{DS} = 0.1mA, V_{GS} = 5.0V
C_{iss}			4.5	pF	V_{DS} = 15V, I_D = 20mA, f = 1MHz
C_{oss}			1.3	pF	V_{DS} = 15V, I_D = 20mA, f = 1MHz
C_{rss}			1.2	pF	V_{DS} = 15V, I_D = 20mA, f = 1MHz

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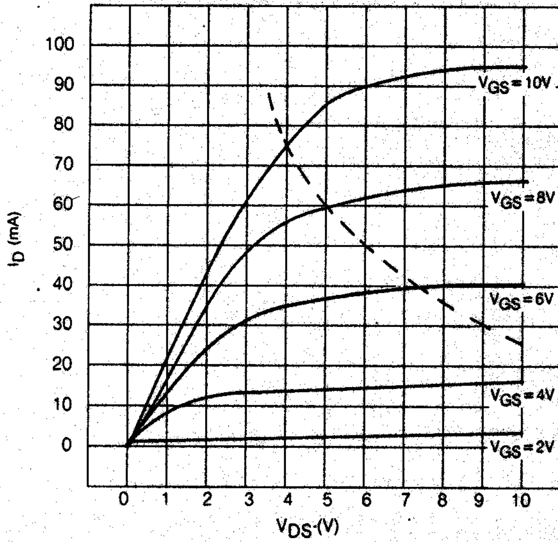
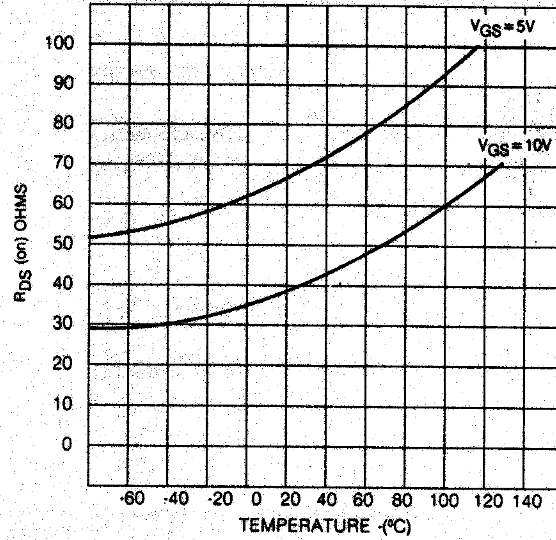
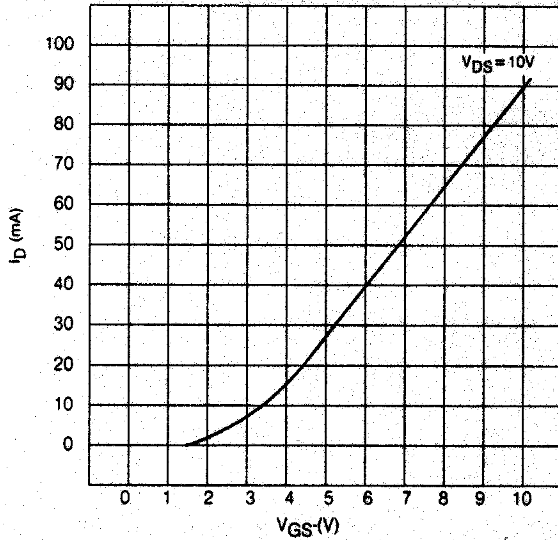
DRAIN CURRENT VS DRAIN-TO-SOURCE VOLTAGE



DRAIN-TO-SOURCE RESISTANCE VS TEMPERATURE



DRAIN CURRENT VS GATE-TO-SOURCE VOLTAGE



TRANSCONDUCTANCE VS GATE-TO-SOURCE VOLTAGE