

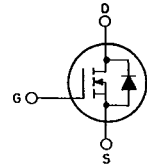


S G S-THOMSON

BUZ71 CHIP

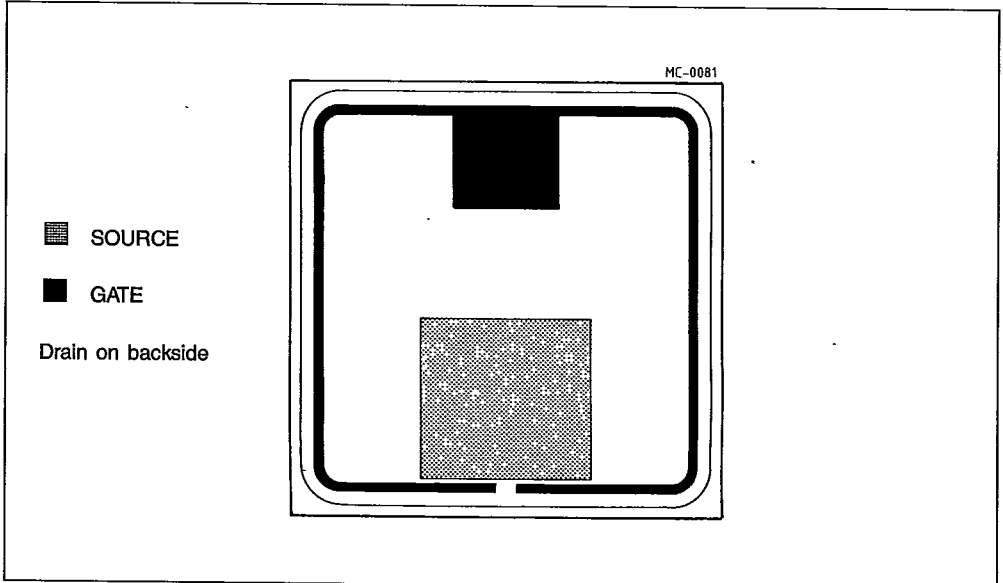
N - CHANNEL ENHANCEMENT MODE POWER MOS TRANSISTOR IN DIE FORM

- DIE SIZE: 95 × 95 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 28 × 30 mils
 - Gate 16 × 18 mils
- RECOMMENDED WIRE BONDING:
 - Source Al - max 10 mils
 - Gate Al - max 5 mils

SCHEMATIC DIAGRAM

V_{DSS}	$R_{DS(on)}$	I_D^*
50 V	0.1 Ω	14 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_{thj-c} max. 3.1°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	$I_D = 250\ \mu\text{A}$ $V_{GS} = 0$	50			V
I_{DSS} Zero gate voltage drain current	$V_{DS} = \text{Max Rating}$ $V_{DS} = \text{Max Rating} \times 0.8$ $T_j = 125^\circ\text{C}$			250 1000	μA μA
I_{GSS} Gate-body leakage current	$V_{GS} = \pm 20\ \text{V}$			100	nA
$V_{GS(th)}$ Gate threshold voltage	$V_{DS} = V_{GS}$ $I_D = 1\ \text{mA}$	2.1		4	V
$R_{DS(on)}$ Static drain-source on resistance	$V_{GS} = 10\ \text{V}$ $I_D = 1\ \text{A}$			0.1	Ω

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