

SCHEMATIC

(see Page 2)

FET NONLINEAR MODEL PARAMETERS ⁽¹⁾

| Parameters | Q1 | Parameters | Q1 |
|------------------------|----------|------------|------|
| VTO | -0.75 | RG | 2.5 |
| VTOSC | 0 | RD | 2.5 |
| ALPHA | 7 | RS | 4.1 |
| BETA | 0.21 | RGMET | 0 |
| GAMMA | 0.09 | KF | 0 |
| GAMMADC ⁽²⁾ | 0.08 | AF | 1 |
| Q | 2.1 | TNOM | 27 |
| DELTA | 1.2 | XTI | 3 |
| VBI | 1 | EG | 1.43 |
| IS | 1e-14 | VTOTC | 0 |
| N | 1 | BETATCE | 0 |
| RIS | 0 | FFE | 1 |
| RID | 0 | | |
| TAU | 7e-12 | | |
| CDS | 0.15e-12 | | |
| RDB | 900 | | |
| CBS | 1.1e-10 | | |
| CGSO ⁽³⁾ | 0.25e-12 | | |
| CGDO ⁽⁴⁾ | 0.04e-12 | | |
| DELTA1 | 0.3 | | |
| DELTA2 | 0 | | |
| FC | 0.5 | | |
| VBR | Infinity | | |

UNITS

| Parameter | Units |
|-------------|-------------|
| capacitance | picofarads |
| inductance | nanohenries |
| resistance | ohms |

MODEL RANGE

Frequency: 0.1 to 16 GHz

Bias: $V_{DS} = 1\text{ V to }3.5\text{ V}$, $I_D = 10\text{ mA to }40\text{ mA}$

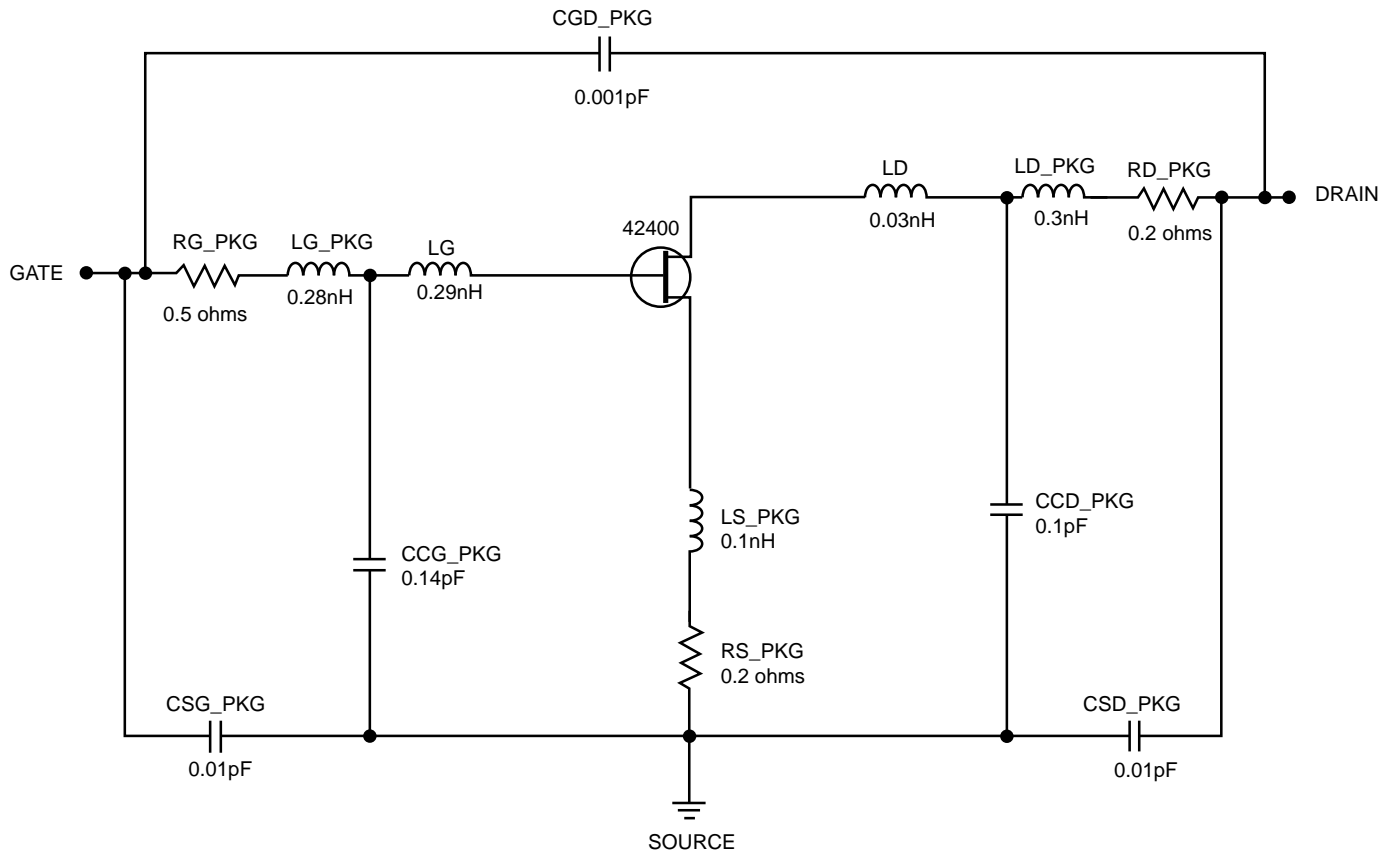
Date: 11/15/96

(1) Series IV Libra TOM Model

The parameter in Libra corresponds to the parameter in PSpice:

- | | |
|-------------|-------|
| (2) GAMMADC | GAMMA |
| (3) CGSO | CGS |
| (4) CGDO | CGD |

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PRINTED IN USA ON RECYCLED PAPER -2/97