

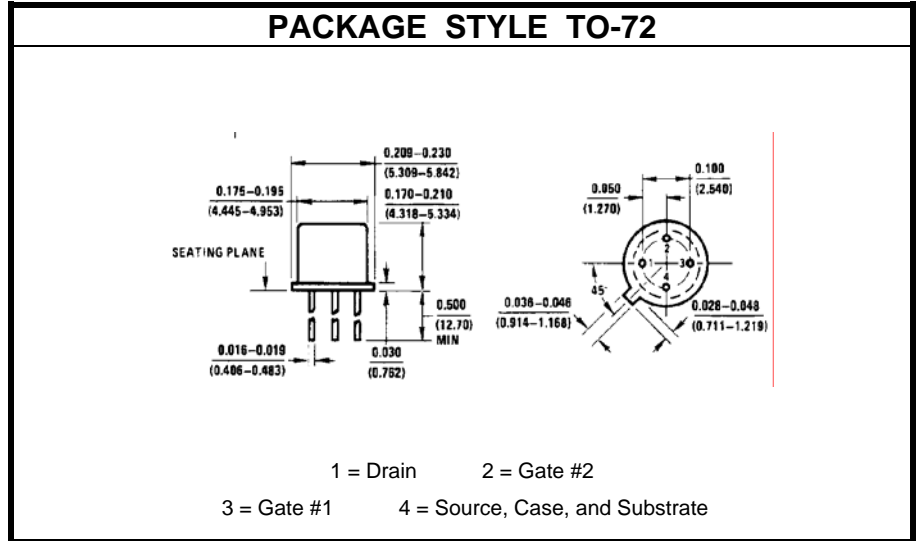
# MOS FIELD-EFFECT TRANSISTOR

## DESCRIPTION:

The **ASI 40822** is a N-Channel Dual-Gate Depletion Type Transistor With Monolithic Gate Protection Diodes, used in RF,IF Amplifier and Mixer Applications up to 150 MHz.

## MAXIMUM RATINGS

<b>I<sub>D</sub></b>	50 mA
<b>V<sub>D</sub></b>	24 V
<b>P<sub>DISS</sub></b>	330 mW @ T <sub>A</sub> = 25 °C
<b>T<sub>J</sub></b>	-65 °C to +175 °C
<b>T<sub>STG</sub></b>	-65 °C to +175 °C



## CHARACTERISTICS T<sub>A</sub> = 25 °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
<b>V<sub>G1S(OFF)</sub></b>	V <sub>DS</sub> = 15 V    V <sub>G2S</sub> = 4.0 V    I <sub>D</sub> = 50 μA		-2.0	-4.0	V
<b>V<sub>G2S(OFF)</sub></b>	V <sub>DS</sub> = 15 V    V <sub>G1S</sub> = 0 V    I <sub>D</sub> = 50 μA		-2.0	-4.0	V
<b>I<sub>G1SSF</sub></b>	V <sub>G1S</sub> = 6.0 V    V <sub>G2S</sub> = V <sub>DS</sub> = 0 V			50	μA
<b>I<sub>G1SSR</sub></b>	V <sub>G1S</sub> = -6.0 V    V <sub>G2S</sub> = V <sub>DS</sub> = 0 V			50	μA
<b>I<sub>G2SSF</sub></b>	V <sub>G2S</sub> = 6.0 V    V <sub>G1S</sub> = V <sub>DS</sub> = 0 V			50	μA
<b>I<sub>G2SSR</sub></b>	V <sub>G2S</sub> = -6.0 V    V <sub>G1S</sub> = V <sub>DS</sub> = 0 V			50	μA
<b>I<sub>DS</sub></b>	V <sub>DS</sub> = 15 V    V <sub>G1S</sub> = 0 V    V <sub>G2S</sub> = 4.0 V	5.0	15	30	mA
<b>V<sub>(BR)G1</sub></b>	I <sub>G1</sub> = ±100 μA		9.0		V
<b>V<sub>(BR)G2</sub></b>	I <sub>G2</sub> = ±100 μA		9.0		V
<b>g<sub>fs</sub></b>	V <sub>DS</sub> = 15 V    V <sub>G2S</sub> = 4.0 V    I <sub>D</sub> = 10 mA f = 1.0 KHZ		12000		μmho
<b>C<sub>rSS</sub></b> <b>C<sub>iSS</sub></b> <b>C<sub>oss</sub></b>	V <sub>DS</sub> = 15 V    V <sub>G2S</sub> = 4.0 V    I <sub>D</sub> = 10 mA f = 1.0 MHz	0.005	6.5 2.0	0.03 9.5	pF
<b>G<sub>PS</sub></b> <b>NF</b>	V <sub>DS</sub> = 15 V    V <sub>G2S</sub> = 4.0 V    I <sub>D</sub> = 10 mA    f = 200 MHz	19	24 2.0	3.5	dB