

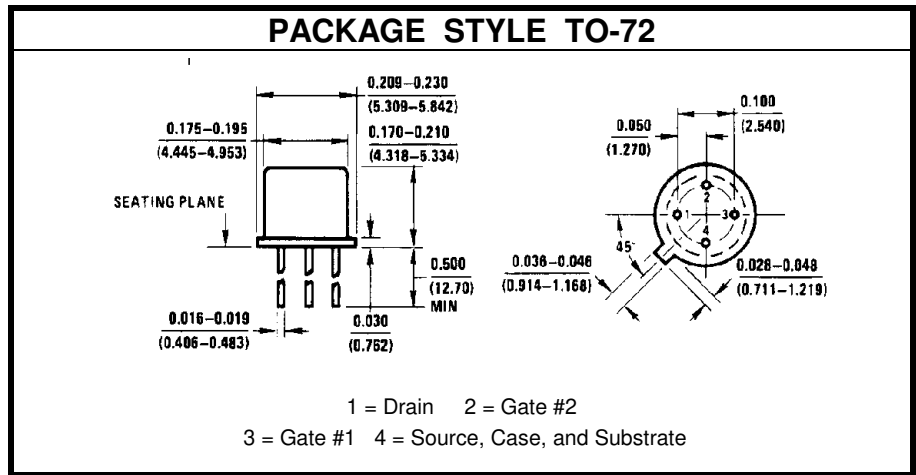
MOS FIELD-EFFECT TRANSISTOR

DESCRIPTION:

The **ASI 3N187** is an N-Channel Dual-Gate Depletion Type Transistor With Monolithic Gate Protection Diodes, used in RF, IF Amplifier and Mixer Applications up to 300 MHz.

MAXIMUM RATINGS

I	50 mA
V	20 V
P_{DISS}	330 mW @ T _A = 25 °C
T_J	-65 °C to +175 °C
T_{STG}	-65 °C to +175 °C



CHARACTERISTICS T_A = 25 °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
V_{G1S(OFF)}	V _{DS} = 15 V V _{G2S} = 4.0 V I _D = 50 μA	-0.5		-4.0	V
V_{G2S(OFF)}	V _{DS} = 15 V V _{G1S} = 0 V I _D = 50 μA	-0.5		-4.0	V
I_{G1SSF}	V _{G1S} = 1.0 V V _{G2S} = V _{DS} = 0 V T _A = 100 °C			50 5.0	μA
I_{G1SSR}	V _{G1S} = -6.0 V V _{G2S} = V _{DS} = 0 V T _A = 100 °C			50 5.0	μA
I_{G2SSF}	V _{G2S} = 6.0 V V _{G1S} = V _{DS} = 0 V T _A = 100 °C			50 5.0	μA
I_{G2SSR}	V _{G2S} = -6.0 V V _{G1S} = V _{DS} = 0 V T _A = 100 °C			50 5.0	μA
V_{(BR)G1}	I _{G1} = ± 100 μA	±6.5			V
V_{(BR)G2}	I _{G2} = ± 100 μA	±6.5			V
I_{DS}	V _{DS} = 15 V V _{G1S} = 0 V V _{G2S} = 4.0 V	5.0	10	30	mA
g_{fs}	V _{DS} = 15 V V _{G2S} = 4.0 V I _D = 10 mA f = 1.0 KHz	7000		18000	μmho
G_{PS}	V _{DS} = 15 V V _{G2S} = 4.0 V I _D = 10 mA f = 200 MHz	16		22	dB
 y_{fs} 	V _{DS} = 15 V V _{G1S} = 0 V V _{G2S} = 4.0 V f = 200 MHz		12000		μmho
C_{rss} C_{iss}	V _{DS} = 15 V V _{G2S} = 4.0 V I _D = 10 mA f = 1.0 MHz	0.005 4.0		0.03 8.5	pF
NF	V _{DS} = 15 V V _{G2S} = 4.0 V I _D = 10 mA f = 200 MHz			4.5	dB