

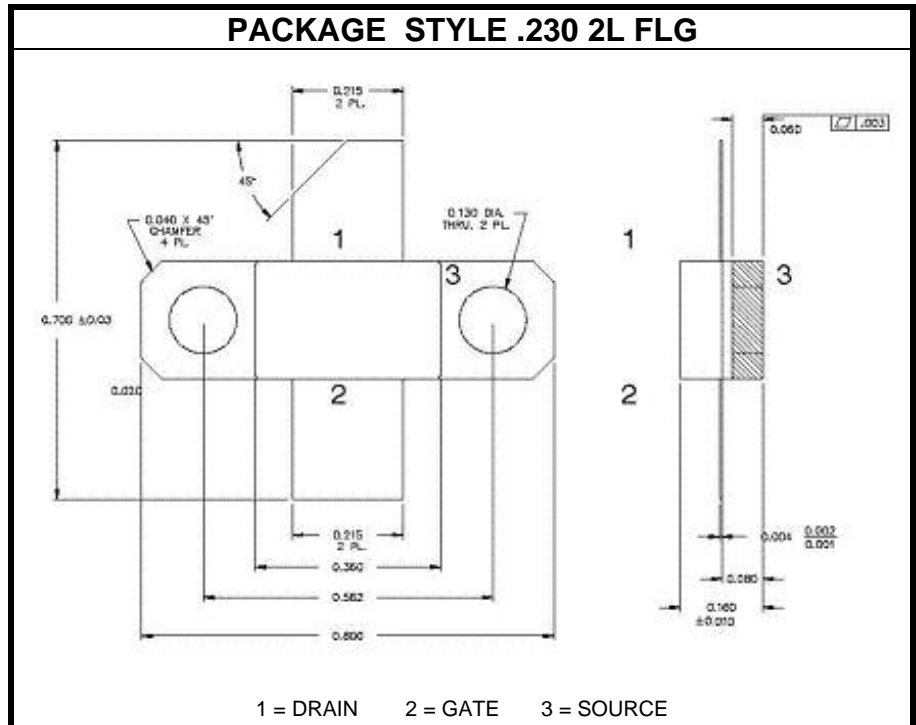
# RF FIELD-EFFECT POWER TRANSISTOR

**DESCRIPTION:**

The **ASI MRF9045LR1** is a high voltage, gold-metallized, laterally diffused metal oxide semiconductor. Ideal for today's RF power amplifier Applications.

**MAXIMUM RATINGS**

<b>I<sub>D</sub></b>	4.25 A
<b>V<sub>DSS</sub></b>	65 V
<b>V<sub>GS</sub></b>	-0.5, +15 V
<b>P<sub>DISS</sub></b>	117 W @ T <sub>C</sub> = 25 °C
<b>T<sub>J</sub></b>	-65 °C to +200 °C
<b>T<sub>STG</sub></b>	-65 °C to +150 °C
<b>θ<sub>JC</sub></b>	1.5 °C/W


**CHARACTERISTICS**    T<sub>C</sub> = 25 °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
<b>BV<sub>DSS</sub></b>	I <sub>D</sub> = 200 μA	65			V
<b>I<sub>DSS</sub></b>	V <sub>DS</sub> = 28 V    V <sub>GS</sub> = 0 V			75	μA
<b>I<sub>GSS</sub></b>	V <sub>DS</sub> = 0 V    V <sub>GS</sub> = 5.0 V			1.3	μA
<b>V<sub>GS(th)</sub></b>	I <sub>D</sub> = 400 μA    V <sub>DS</sub> = 10 V			4.8	V
<b>V<sub>DS(on)</sub></b>	I <sub>D</sub> = 1.0 A    V <sub>GS</sub> = 10 V		0.25		V
<b>g<sub>fs</sub></b>	I <sub>D</sub> = 1.0 A    V <sub>DS</sub> = 10 V		3.0		S
<b>C<sub>iss</sub></b>	V <sub>DS</sub> = 28 V    V <sub>GS</sub> = 0 V    f = 1.0 MHz		73		pF
<b>C<sub>oss</sub></b>			23		
<b>C<sub>rss</sub></b>			1.2		
<b>G<sub>L</sub></b>	V <sub>DS</sub> = 28 V    I <sub>DQ</sub> = 450 mA    P <sub>out</sub> = 6 W f = 895 MHz	19	20		dB
<b>P1dB</b>	V <sub>DS</sub> = 28 V    1 dB compression I <sub>DQ</sub> = 450 mA    f = 895 MHz	45	60		W
<b>IMD</b>	V <sub>DS</sub> = 28 V    I <sub>DQ</sub> = 450 mA    P <sub>OUT</sub> = 45 W f = 895 MHz		31		dBc
<b>IRL</b>			10		dB