

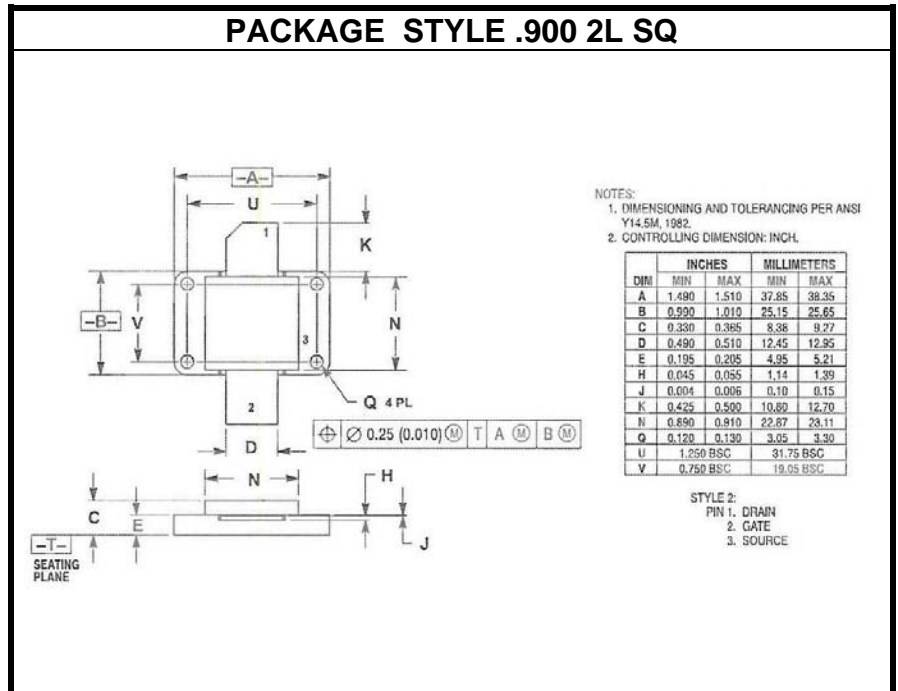
# POWER FIELD EFFECT TRANSISTOR

**DESCRIPTION:**

The **ASI MRF157** is an Enhancement-Mode N-Channel MOS designed for linear large-signal output stages to 80 MHz.

**MAXIMUM RATINGS**

<b>I<sub>D</sub></b>	60 Adc
<b>V<sub>DSS</sub></b>	125 V
<b>V<sub>DGO</sub></b>	125 V
<b>V<sub>GS</sub></b>	±40 V
<b>P<sub>DISS</sub></b>	1350 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>	0.13 °C/W


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

SYMBOL	TEST CONDITIONS		MINIMUM	TYPICAL	MAXIMUM	UNITS
<b>V<sub>(BR)DSS</sub></b>	I <sub>D</sub> = 100 mA	V <sub>GS</sub> = 0 V	125			<b>V</b>
<b>I<sub>DSS</sub></b>	V <sub>DSS</sub> = 50 V	V <sub>GS</sub> = 0 V			20	<b>mA</b>
<b>I<sub>GSS</sub></b>	V <sub>GS</sub> = 20 V	V <sub>DS</sub> = 0 V			5.0	<b>μA</b>
<b>V<sub>GS(th)</sub></b>	V <sub>DS</sub> = 10 V	I <sub>D</sub> = 100 mA	1.0		5.0	<b>V</b>
<b>V<sub>DS(on)</sub></b>	V <sub>DS</sub> = 10 V	I <sub>D</sub> = 40 A	1.0		5.0	<b>V</b>
<b>g<sub>fs</sub></b>	V <sub>DS</sub> = 10 V	I <sub>D</sub> = 20 A	16			<b>mhos</b>
<b>C<sub>iss</sub></b>	V <sub>DS</sub> = 50 V	V <sub>GS</sub> = 0 V	f = 1.0 MHz	1800		<b>pF</b>
<b>C<sub>oss</sub></b>				750		
<b>C<sub>rss</sub></b>				75		
<b>G<sub>ps</sub></b>	V <sub>DD</sub> = 50 V	I <sub>DQ</sub> = 800 mA	18	21		<b>dB</b>
<b>η</b>	P <sub>out</sub> = 600 W		45	50		<b>%</b>
<b>IMD<sub>(d3)</sub></b>				-25		<b>dB</b>