

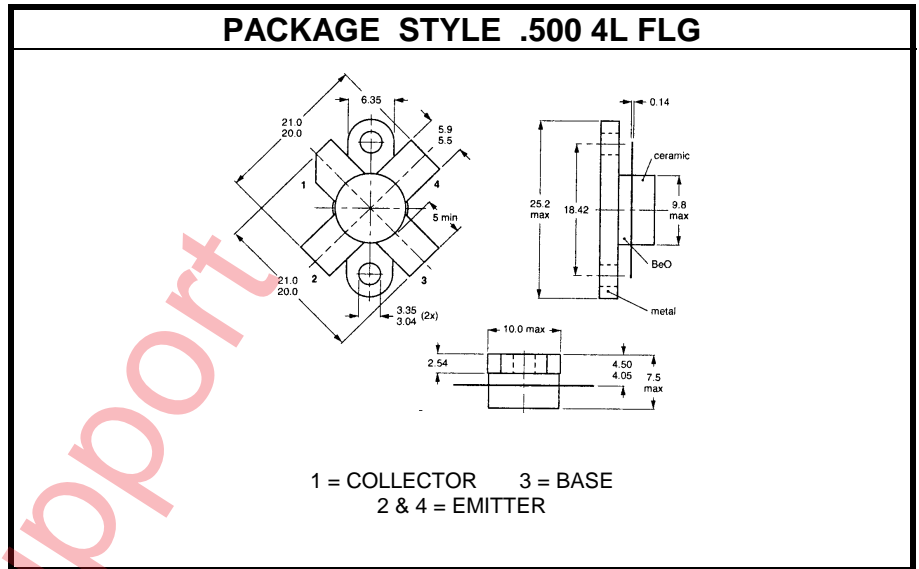
# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

The **ASI MRF422** is Designed for 2.0 MHz to 30 MHz, 28 V High Power Linear Amplifier Applications. For  $h_{FE}$  Matched Pairs Order **ASI MRF422MP**.

**MAXIMUM RATINGS**

<b>I</b>	20 A
<b>V</b>	40 V
<b>P<sub>DISS</sub></b>	290 W @ $T_C = 25\text{ }^\circ\text{C}$
<b>T<sub>J</sub></b>	-65 °C to +150 °C
<b>T<sub>STG</sub></b>	-65 °C to +150 °C
<b><math>\theta_{JC}</math></b>	0.6 °C/W


**CHARACTERISTICS**  $T_C = 25\text{ }^\circ\text{C}$ 

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
<b>BV<sub>CEO</sub></b>	$I_C = 200\text{ mA}$	35			<b>V</b>
<b>BV<sub>CES</sub></b>	$I_C = 100\text{ mA}$	85			<b>V</b>
<b>BV<sub>CBO</sub></b>	$I_C = 100\text{ mA}$	85			<b>V</b>
<b>BV<sub>EBO</sub></b>	$I_E = 10\text{ mA}$	3.0			<b>V</b>
<b>I<sub>CES</sub></b>	$V_{CE} = 28\text{ V}$			20	<b>mA</b>
<b>h<sub>FE</sub></b>	$V_{CE} = 5.0\text{ V}$ $I_C = 5.0\text{ A}$	10	30	120	<b>---</b>
<b>C<sub>ob</sub></b>	$V_{CB} = 28\text{ V}$ $f = 1.0\text{ MHz}$		420		<b>pF</b>
<b>P<sub>out</sub></b>	$V_{CE} = 28\text{ V}$ $f = 30\text{ MHz}$	150			<b>W(PEP)</b>
<b>G<sub>PE</sub></b>	$V_{CC} = 28\text{ V}$ $I_{CQ} = 150\text{ mA}$ $P_{out} = 150\text{ W (PEP)}$	10	13		<b>dB</b>
<b><math>\eta</math></b>	$I_{C(max)} = 6.7\text{ A}$ $f = 30\text{ MHz}$		45		<b>%</b>
<b>IMD</b>			-33		<b>dB</b>