

# MICROWAVE TRANSISTOR

**DESCRIPTION:**

The **MRA1214-55H** is a Common Base Transistor Designed for Long Pulse High Reliability L-Band Radar Applications.

**FEATURES INCLUDE:**

- Gold Metallization
- Hermetic Package
- Input/Output Matching

**MAXIMUM RATINGS**

<b>I<sub>C</sub></b>	5.0 A
<b>V<sub>CB</sub></b>	55 V
<b>P<sub>DISS</sub></b>	125 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 +200 °C
<b>θ<sub>JC</sub></b>	1.4 °C/W

**PACKAGE - .400 x .400 2NL FLG**

	MINIMUM Inches/mm	MAXIMUM Inches/mm		MINIMUM Inches/mm	MAXIMUM Inches/mm
	.055/1.40		K	.008/0.05	.006/0.15
B	.180/3.05	.130/3.30	L	.055/1.40	.065/1.65
C		.785/19.94	H	.080/2.03	.095/2.41
D	.455/11.56	.465/11.81	N		.195/4.95
E		.136/3.30	P	.455/11.56	.468/11.89
F		.830/21.84			
G		.128/3.25			
H	.838/21.28	.850/21.59			
I	1.995/50.81	1.105/28.07			
J	.025/13.34	.535/13.59			

1 = COLLECTER    2 & 4 = BASE  
3 = EMITTER

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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
<b>BV<sub>CBO</sub></b>	I <sub>C</sub> = 20 mA	55			<b>V</b>
<b>BV<sub>CER</sub></b>	I <sub>C</sub> = 40 mA    R <sub>BE</sub> = 10 Ω	55			<b>V</b>
<b>BV<sub>EBO</sub></b>	I <sub>E</sub> = 2 mA	3.5			<b>V</b>
<b>I<sub>CES</sub></b>	V <sub>CE</sub> = 28 V			10	<b>mA</b>
<b>h<sub>FE</sub></b>	V <sub>CE</sub> = 5 V    I <sub>C</sub> = 2.0 A	15		150	<b>---</b>
<b>P<sub>G</sub></b>	V <sub>CC</sub> = 28 V    P <sub>OUT</sub> = 55 W    f = 1214 to 1400 MHz	6.6	7.2		<b>dB</b>
<b>η<sub>C</sub></b>	Pulse Width = 1000 μS    Duty Cycle = 10%	50	55		<b>%</b>