

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

The **ASI UMIL20** is a Common Emitter Device Designed for Class A , AB and C Amplifier Applications in the 225 to 400 MHz Military Communications Band.

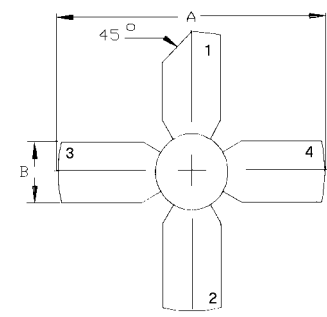
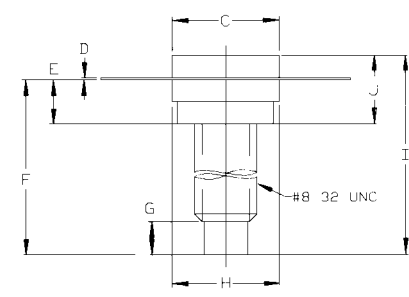
**FEATURES:**

- Direct Replacement for **MRF323**
- $P_G = 12$  dB Typical at 400 MHz
- **Omnigold™** Metalization System

**MAXIMUM RATINGS**

<b>I<sub>C</sub></b>	2.5 A
<b>V<sub>CB0</sub></b>	65 V
<b>P<sub>DISS</sub></b>	35 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>q<sub>JC</sub></b>	5.0 °C/W

**PACKAGE STYLE .280 4L STUD**

	MINIMUM Inches/mm	MAXIMUM Inches/mm
A	1.010/25,65	1.055/26,80
B	.220/5,59	.230/5,84
C	.270/6,86	.285/7,24
D	.003/0,08	.007/0,18
E	.117/2,97	.137/3,48
F	.5/2/14,53	
G	.130/3,30	
H	.275/6,99	.285/7,24
I	.640/16,26	
J	.175/4,45	.21/7,51

1 = Collector    2 = Base  
 3 & 4 = Emitter

ORDER CODE: ASI10494

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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
<b>BV<sub>CB0</sub></b>	I <sub>C</sub> = 20 mA	65			V
<b>BV<sub>CER</sub></b>	I <sub>C</sub> = 20 mA    R <sub>BE</sub> = 200 Ω	33			V
<b>BV<sub>EBO</sub></b>	I <sub>E</sub> = 20 mA	3.5			V
<b>I<sub>CB0</sub></b>	V <sub>CB</sub> = 30 V			2.0	mA
<b>h<sub>FE</sub></b>	V <sub>CE</sub> = 5 V    I <sub>C</sub> = 1.0 A	20		200	---
<b>C<sub>OB</sub></b>	V <sub>CB</sub> = 28 V    f = 1.0 MHz			20	pF
<b>P<sub>G</sub></b>	V <sub>CE</sub> = 28 V    P <sub>OUT</sub> = 20 W    f = 400 MHz	10	12		dB
<b>h<sub>C</sub></b>		50			%