

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

The **ASI 2223-20** is a Common Base Device Designed for Pulsed S-Band Radar Amplifier Applications

**FEATURES:**

- Internal Input/Output Matching Networks
- Emitter Balasting
- **Omnigold™** Metalization System

**MAXIMUM RATINGS**

<b>I<sub>C</sub></b>	3.0 A
<b>V<sub>CC</sub></b>	25 V
<b>P<sub>DISS</sub></b>	55 W @ T <sub>C</sub> ≤ 50 °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>	2.7 °C/W

**PACKAGE STYLE .310 2L FLG**

DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.095 / 2.41	.105 / 2.67
B	.100 / 2.54	.120 / 3.05
C	.050 / 1.27	
D	.286 / 7.26	.306 / 7.77
E	.110 / 2.79	.130 / 3.30
F	.306 / 7.77	.318 / 8.08
G		.148 / 3.76
H		.400 / 10.16
I		.119 / 3.02
J	.552 / 14.02	.572 / 14.53
K	.790 / 20.07	.810 / 20.57
L	.300 / 7.62	.320 / 8.13
M	.003 / 0.08	.006 / 0.15
N	.052 / 1.32	.072 / 1.83
P	.118 / 3.00	.131 / 3.33
R		.230 / 5.84

**ORDER CODE: ASI10533**

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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
<b>BV<sub>CBO</sub></b>	I <sub>C</sub> = 12 mA	45			<b>V</b>
<b>BV<sub>CER</sub></b>	I <sub>C</sub> = 25 mA    R <sub>BE</sub> = 10 Ω	45			<b>V</b>
<b>BV<sub>EBO</sub></b>	I <sub>E</sub> = 2.5 mA	3.5			<b>V</b>
<b>I<sub>CBO</sub></b>	V <sub>CB</sub> = 22 V			2.5	<b>mA</b>
<b>h<sub>FE</sub></b>	V <sub>CE</sub> = 5.0 V    I <sub>C</sub> = 2.0 A	30		300	<b>---</b>
<b>P<sub>G</sub></b>	V <sub>CC</sub> = 22 V    P <sub>OUT</sub> = 20 W    f = 2.2 – 2.3 GHz	7.0			<b>dB</b>
<b>η<sub>C</sub></b>		40			<b>%</b>