

# NPN RF POWER TRANSISTOR

**DESCRIPTION:**

The **ASI MSC74520** is a Common Base Device Designed for Class C Applications in the 1.6 - 1.8 GHz bands.

**FEATURES INCLUDE:**

- Input/Output Matching
- Gold Metallization
- Hermetically Sealed Package
- Emitter Ballasting

**MAXIMUM RATINGS**

<b>I<sub>C</sub></b>	1.0 A
<b>V<sub>CB0</sub></b>	40 V
<b>P<sub>DISS</sub></b>	58 W @ T <sub>C</sub> = 25 °C
<b>T<sub>J</sub></b>	-55 °C to +200 °C
<b>T<sub>STG</sub></b>	-55 °C to +200 °C
<b>θ<sub>JC</sub></b>	3.0 °C/W

**PACKAGE STYLE 400 2L FLG (Style 1)**

DIM	MILLIMETER	TOL	INCHES	TOL
A	20.32	.76	.800	.050
B	10.16	.13	.400	.005
C	9.78	.13	.385	.005
D	45°	5°	45°	5°
E	3.81	.13	.150	.005
F	1.52	.13	.060	.005
G	1.52R	.13	.060R	.005
H	3.05	.13	.120	.005
I	3.30 DIA	.13	.130 DIA	.005
J	22.86	.13	.900	.005
K	16.51	.13	.650	.005
M	4.70	REF	.185	REF
N	0.13	.02	.005	.001

**STYLE 1:**  
 PIN1 = COLLECTOR  
 2 = BASE  
 3 = EMITTER

**STYLE 2:**  
 PIN1 = COLLECTOR  
 2 = EMITTER  
 3 = BASE

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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
<b>BV<sub>CB0</sub></b>	I <sub>C</sub> = 2.0 mA	40			V
<b>BV<sub>EBO</sub></b>	I <sub>C</sub> = 2.0 mA	3.5			V
<b>I<sub>CB0</sub></b>	V <sub>CB</sub> = 28 V			0.5	mA
<b>h<sub>FE</sub></b>	V <sub>CE</sub> = 5 V    I <sub>C</sub> = 0.4 A	10		200	---
<b>P<sub>G</sub></b>	V <sub>CC</sub> = 20 V    P <sub>IN</sub> = 4.0 W    f = 1.6 - 1.8 GHz	6.0			dB
<b>η<sub>c</sub></b>	Pulse Width = 100 μS    Duty Cycle = 10%	45			%