

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI MSC80196** is Designed for Class A Linear Applications up to 2.0 GHz.

FEATURES:

- Class A Operation
- $P_G = 7.0$ dB at 1.0 W/2.0 GHz
- **Omnigold™** Metalization System

MAXIMUM RATINGS

I_C	500 mA
V_{CE}	20 V
P_{DISS}	10 W
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +200 °C
θ_{JC}	17.0 °C/W

PACKAGE STYLE .250 2L FLG

DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.028 / 0.71	.032 / 0.81
B	.740 / 18.80	
C	.245 / 6.22	.255 / 6.48
D	.128 / 3.25	.132 / 3.35
E		.125 / 3.18
F	.110 / 2.79	.117 / 2.97
G		.117 / 2.97
H	.560 / 14.22	.570 / 14.48
I	.790 / 20.07	.810 / 20.57
J	.225 / 5.72	.235 / 5.97
K	.165 / 4.19	.185 / 4.70
L	.003 / 0.08	.007 / 0.18
M	.058 / 1.47	.068 / 1.73
N	.119 / 3.02	.135 / 3.43
P	.149 / 3.78	.187 / 4.75

COMMON EMITTER

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

SYMBOL	TEST CONDITIONS		MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CBO}	$I_C = 1.0$ mA		50			V
BV_{CEO}	$I_C = 5.0$ mA		20			V
BV_{EBO}	$I_E = 1.0$ mA		3.5			V
I_{CEO}	$V_{CE} = 18$ V				1.0	mA
h_{FE}	$V_{CE} = 5.0$ V	$I_C = 1.0$ A	15		120	---
C_{OB}	$V_{CB} = 28$ V	$f = 1.0$ MHz			5.0	pF
P_G	$V_{CE} = 18$ V $I_{CQ} = 220$ mA	$P_{OUT} = 1.0$ W $f = 2.0$ GHz	7.0			dB