



2N6166

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI 2N6166** is Designed to operate in a collector modulated VHF Power Amplifier Applications up to 200 MHz.

FEATURES:

- $\eta_C = 60\%$ min. @ 100 W/150 MHz
- $P_G = 6.0$ dB min. @ 100 W/150 MHz
- **Omnigold™** Metalization System

MAXIMUM RATINGS

I_C	9.0 A
V_{CB0}	65 V
V_{EBO}	4.0 V
P_{DISS}	117 W @ $T_C = 25^\circ C$
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +150 °C
θ_{JC}	1.5 °C/W

PACKAGE STYLE .500 4L FLG

DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.220 / 5.59	.230 / 5.84
B	.125 / 3.18	
C	.245 / 6.22	.255 / 6.48
D	.720 / 18.28	.730 / 18.54
E	.125 / 3.18	
F	.970 / 24.64	.980 / 24.89
G	.495 / 12.57	.505 / 12.83
H	.003 / 0.08	.007 / 0.18
I	.090 / 2.29	.110 / 2.79
J	.150 / 3.81	.175 / 4.45
K	.280 / 7.11	
L	.980 / 24.89	1.050 / 26.67

ORDER CODE: ASI10790

CHARACTERISTICS $T_C = 25^\circ C$

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CES}	$I_C = 200$ mA	65			V
BV_{CEO}	$I_C = 200$ mA	35			V
BV_{EBO}	$I_E = 10$ Ma	4.0			V
I_{CES}	$V_{CE} = 30$ V			5.0	mA
I_{CBO}	$V_{CB} = 30$ V			30	mA
h_{FE}	$V_{CE} = 5.0$ V $I_C = 500$ mA	5.0			---
C_{OB}	$V_{CE} = 28$ V $f = 1.0$ MHz			130	pF
P_G	$V_{CC} = 28$ V $P_{OUT} = 100$ W $f = 150$ MHz	6.0			dB
η_C		60			%

