

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI AVF300** is a high power Class C transistor, Designed for IFF/DME/TACAN Applications in 960-1215 MHz.

FEATURES:

- Internal Input/Output Matching Networks
- $P_E = 7.7$ dB at 300 W/1090 MHz
- **Omnigold™** Metalization System

MAXIMUM RATINGS

I_C	20 A
V_{CC}	65 V
P_{DISS}	1166 W @ $T_C = 25$ °C
T_J	-65 °C to +250 °C
T_{STG}	-65 °C to +200 °C
θ_{JC}	0.15 °C/W

PACKAGE STYLE .400 2NL FLG

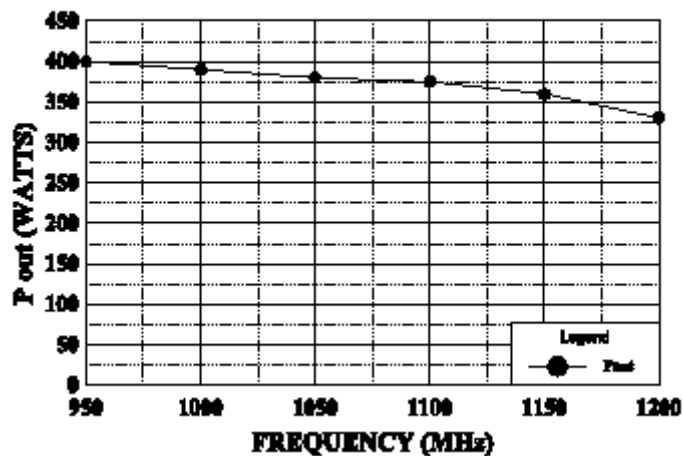
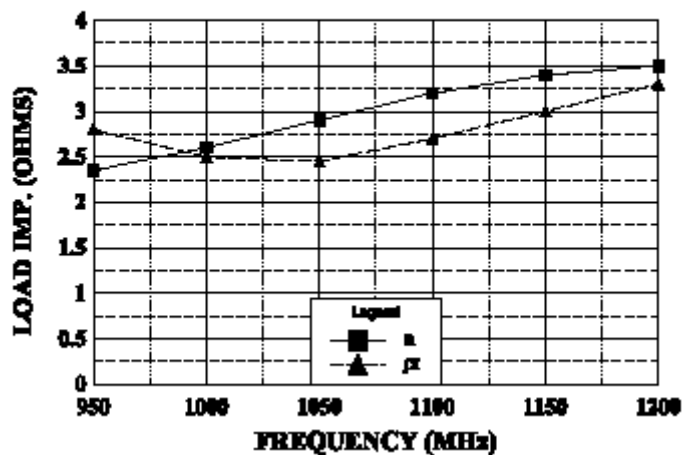
DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.020 / 0.51	.030 / 0.76
B	.100 / 2.54	
C	.376 / 9.55	.396 / 10.06
D	.110 / 2.79	.130 / 3.30
E	.395 / 10.03	.407 / 10.34
F	.193 / 4.90	
G	.450 / 11.43	
H	.125 / 3.18	
I	.640 / 16.26	.660 / 16.76
J	.890 / 22.61	.910 / 23.11
K	.395 / 10.03	.415 / 10.54
L	.004 / 0.10	.007 / 0.18
M	.052 / 1.32	.072 / 1.83
N	.118 / 3.00	.131 / 3.33
P		.230 / 5.84

ORDER CODE: ASI10572

CHARACTERISTICS $T_C = 25$ °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CES}	$I_C = 50$ mA $R_{BE} = 10$ Ω	65			V
BV_{EBO}	$I_E = 25$ mA	2.0			V
I_{CES}	$V_{CE} = 50$ V			25	mA
h_{FE}	$V_{CE} = 5.0$ V $I_C = 1.0$ A	10		120	---
G_P	$V_{CC} = 50$ V $P_{OUT} = 300$ W $f = 960 - 1215$ MHz	6.5			dB
η_C		45			%

Pulse Width = 10 μ sec, Duty Cycle 10 %

BROADBAND POWER OUTPUT vs FREQUENCY
 $V_{cc} = 50\text{ V}, P_{in} = 60\text{ W}$

SERIES COLLECTOR LOAD IMPEDANCE
 $V_{cc} = 50\text{ V}, P_{in} = 60\text{ W}$


SERIES INPUT IMPEDANCE vs FREQUENCY

V_{CC} = 50 V, P_{in} = 60 W

