NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI TVV007** is Designed for Television Band III Applications up to 225 MHz.

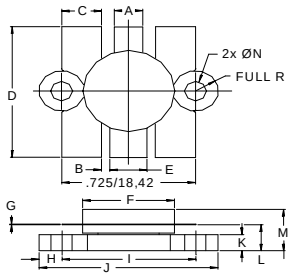
FEATURES:

- Common Emitter
- 5:1 VWR capability
- P_G = 10 dB at 7.5 W/225 MHz
- ***Omnigold***™ Metalization System

MAXIMUM RATINGS

I_C	4.0 A
V_{CB}	45 V
V_{CE}	25 V
P_{DISS}	53 W @ T_C = 25 °C
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +150 °C
θ_{JC}	3.3 °C/W

PACKAGE STYLE .500 6L FLG



DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.150 / 3.43	.160 / 4.06
B	.045 / 1.14	
C	.210 / 5.33	.220 / 5.59
D	.835 / 21.21	.865 / 21.97
E	.200 / 5.08	.210 / 5.33
F	.490 / 12.45	.510 / 12.95
G	.003 / 0.08	.007 / 0.18
H	.125 / 3.18	
I	.725 / 18.42	
J	.970 / 24.64	.980 / 24.89
K	.090 / 2.29	.105 / 2.67
L	.150 / 3.81	.170 / 4.32
M		.285 / 7.24
N	.120 / 3.05	.135 / 3.43

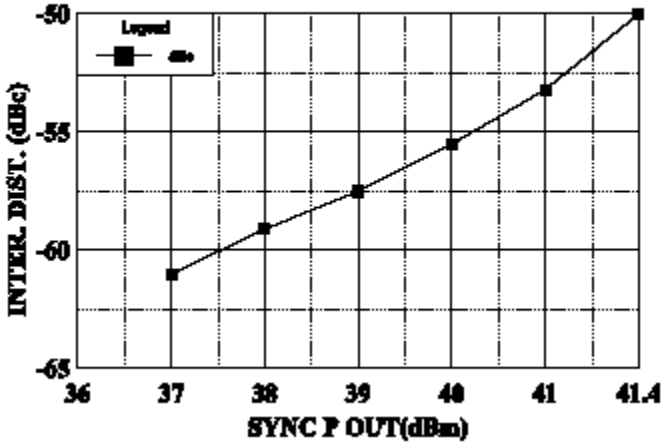
ORDER CODE: ASI10655

CHARACTERISTICS T_C = 25 °C

SYMBOL	TEST CONDITIONS			MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CEO}	I_C = 25 mA			25			V
BV_{CER}	I_C = 50 mA	R_{BE} = 10 Ω		45			V
BV_{EBO}	I_E = 10 mA			4.0			V
h_{FE}	V_{CE} = 5.0 V	I_C = 500 A		10			---
P_G	V_{CE} = 25 V	I_C = 1.2 A	f = 175-225 MHz	10	11.2		Db
IMD_1	P_{OUT} = 7.5 W			-50	-52		dBc
VSWR						5:1	---
η_C					33		%
C_{ob}	V_{EB} = 25V		f = 1.0 MHz		35		pF

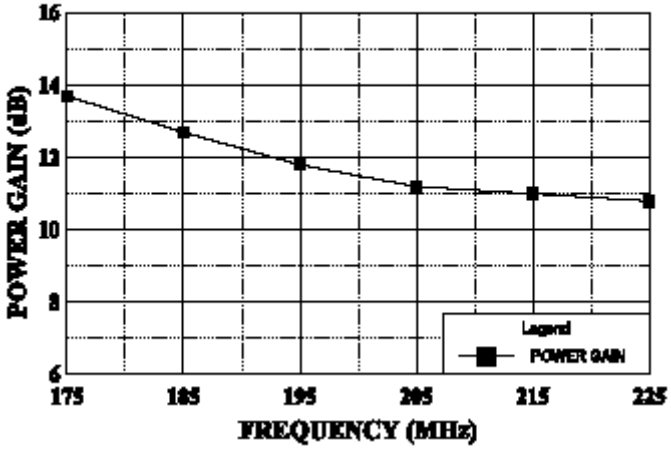
INTERMODULATION DISTORT. vs SYNC Pout

Vcc = 25, Frequency 225 MHz



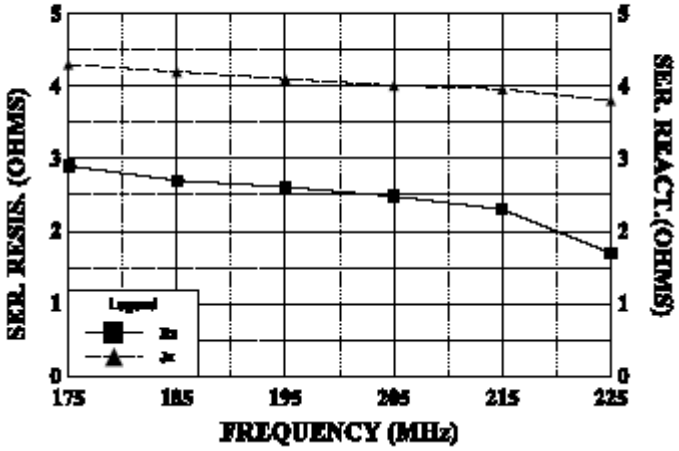
POWER GAIN vs FREQUENCY

Vcc 25 Volts



SERIES INPUT IMPEDANCE vs FREQUENCY

Vcc = 25V



SERIES LOAD IMPEDANCE vs FREQUENCY

Vcc = 25 V