

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

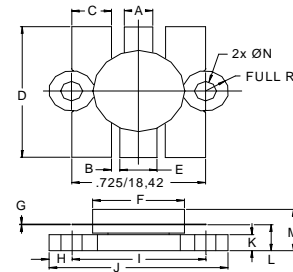
The **ASI TVV007** is Designed for Television Band III Applications up to 225 MHz.

**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
$\theta_{JC}$	3.3 °C/W

**PACKAGE STYLE .500 6L FLG**


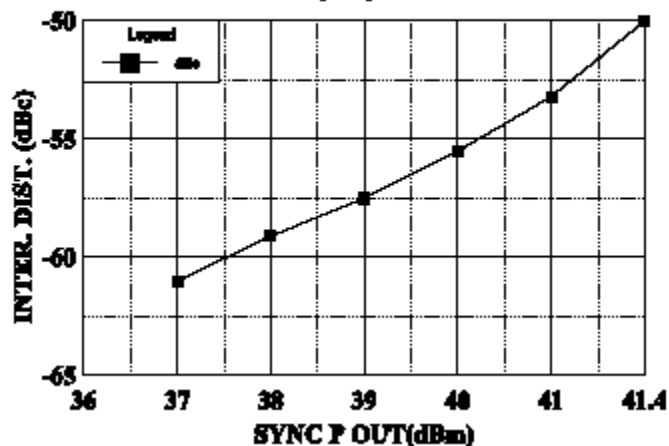
DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.150 / 3.43	.160 / 4.06
B	.045 / 1.14	
C	.210 / 5.33	.220 / 5.59
D	.835 / 21.21	.865 / 21.97
E	.200 / 5.08	.210 / 5.33
F	.490 / 12.45	.510 / 12.95
G	.003 / 0.08	.007 / 0.18
H	.125 / 3.18	
I	.725 / 18.42	
J	.970 / 24.64	.980 / 24.89
K	.090 / 2.29	.105 / 2.67
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	---
$\eta_c$			33		%
$C_{ob}$	$V_{EB} = 25$ V $f = 1.0$ MHz		35		pF

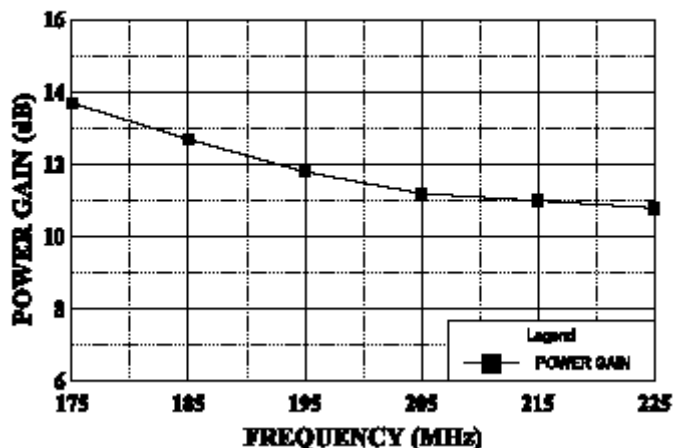
**INTERMODULATION DISTORT. vs SYNC Power**

V<sub>cc</sub> = 25, Frequency 225 MHz



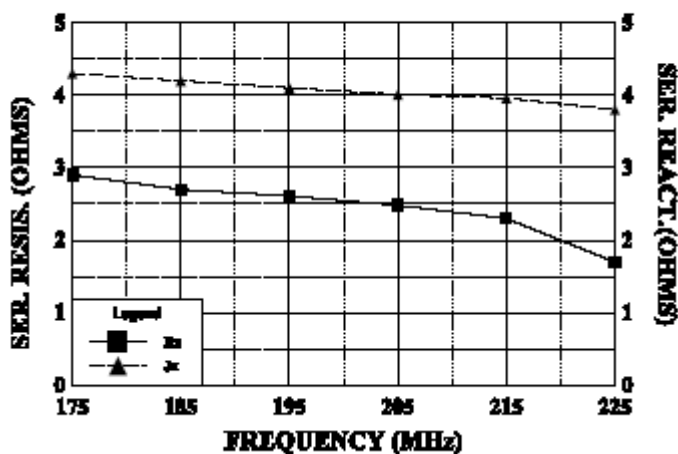
**POWER GAIN vs FREQUENCY**

V<sub>cc</sub> 25 Volts



**SERIES INPUT IMPEDANCE vs FREQUENCY**

V<sub>cc</sub> = 25V



**SERIES LOAD IMPEDANCE vs FREQUENCY**

V<sub>cc</sub> = 25 V

