

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

The **ASI TVV030A** is Designed for Television Band III Applications up to 225 MHz.

**FEATURES:**

- Common Emitter
- $P_G = 7.5$  dB at 30 W/225 MHz
- **Omnigold™** Metalization System
- Emitter Ballasting

**MAXIMUM RATINGS**

$I_C$	14 A
$V_{CB0}$	45 V
$V_{CEO}$	25 V
$V_{EBO}$	4.0 V
$P_{DISS}$	146 W @ $T_C = 25$ °C
$T_J$	-65 °C to +200 °C
$T_{STG}$	-65 °C to +150 °C
$\theta_{JC}$	1.2 °C/W

**PACKAGE STYLE .500 4L STUD(A)**

DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.220 / 5.59	.230 / 5.84
B		1.050 / 26.67
C	.545 / 13.84	.555 / 14.10
D	.495 / 12.57	.505 / 12.83
E	.003 / 0.08	.007 / 0.18
F		.830 / 21.08
G	.185 / 4.70	.198 / 5.03
H	.497 / 12.62	.530 / 13.46

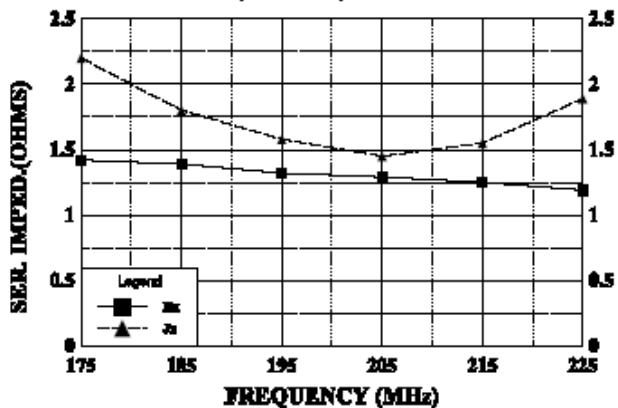
**ORDER CODE: ASI10661**

**CHARACTERISTICS**  $T_C = 25$  °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$BV_{CES}$	$I_C = 100$ mA $R_{BE} = 10$ $\Omega$	45			V
$BV_{CEO}$	$I_C = 25$ mA	25			V
$BV_{EBO}$	$I_E = 10$ mA	4.0			V
$h_{FE}$	$V_{CE} = 5.0$ V $I_C = 1.0$ mA	10	40		---
$C_{OB}$	$V_{CB} = 30$ V $f = 1.0$ MHz		135		pF
$P_G$	$V_{CE} = 25$ V $I_C = 5.0$ A $f = 175$ -225 MHz	6.0	7.0		dB
$IMD_1$	$P_{OUT} = 30$ W		-50		dBc
VSWR				3:1	---

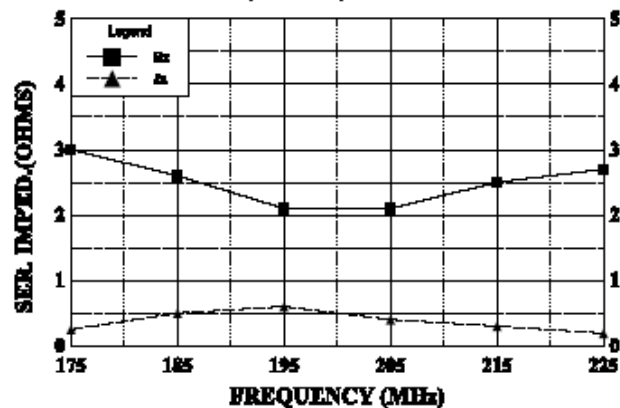
### SERIES INPUT IMPEDANCE vs FREQUENCY

V<sub>ce</sub> = 25V, I<sub>c</sub> = 5.00A, T<sub>th</sub> = 65 C



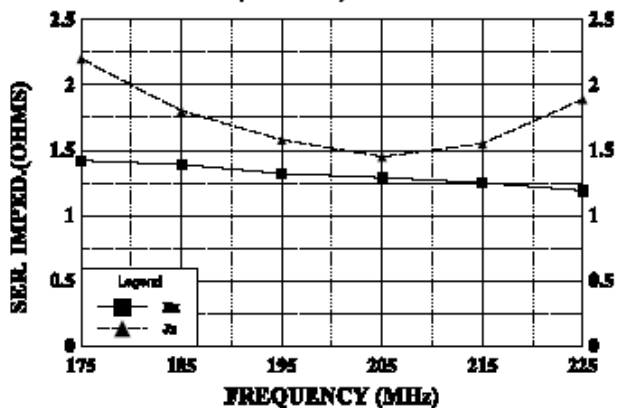
### SERIES LOAD IMPEDANCE vs FREQUENCY

V<sub>ce</sub> = 25V, I<sub>c</sub> = 5.0A, T<sub>th</sub> = 65 C



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V<sub>ce</sub> = 25V, I<sub>c</sub> = 5.00A, T<sub>th</sub> = 65 C



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