

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
θ_{JC}	1.2 °C/W

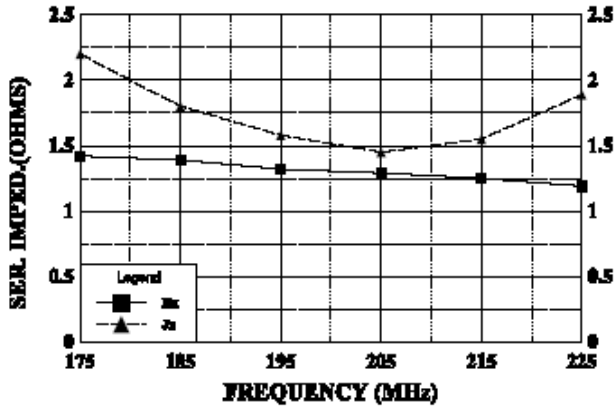
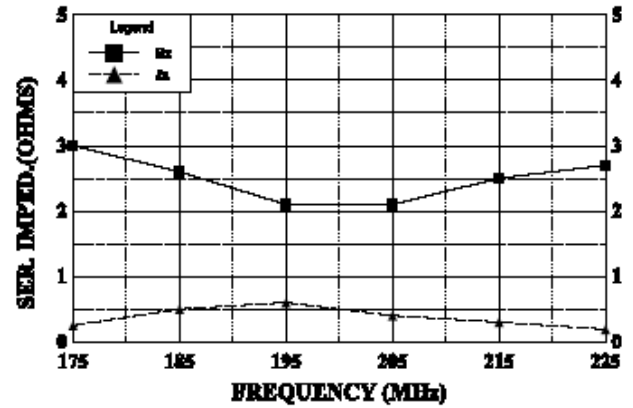
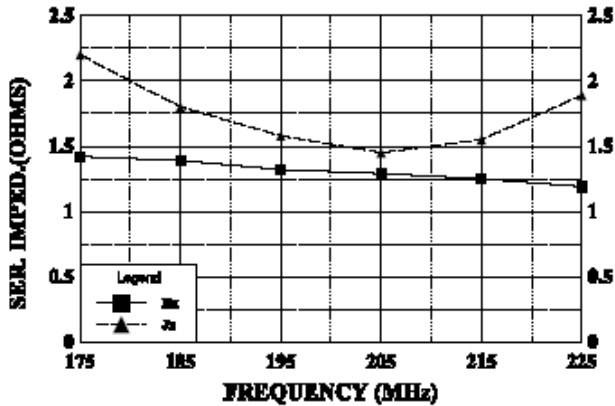
PACKAGE STYLE .500 4L STUD(A)

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	$R_{BE} = 10$ Ω	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	6.0	7.0		dB
IMD_1	$P_{OUT} = 30$ W	$f = 175-225$ MHz		-50		dBc
VSWR					3:1	---

SERIES INPUT IMPEDANCE vs FREQUENCY
 $V_{ce} = 25V, I_c = 5.00A, T_{th} = 65\text{ C}$

SERIES LOAD IMPEDANCE vs FREQUENCY
 $V_{ce} = 25V, I_c = 5.0A, T_{th} = 65\text{ C}$

SERIES INPUT IMPEDANCE vs FREQUENCY
 $V_{ce} = 25V, I_c = 5.00A, T_{th} = 65\text{ C}$

SERIES LOAD IMPEDANCE vs FREQUENCY
 $V_{ce} = 25V, I_c = 5.0A, T_{th} = 65\text{ C}$
