

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

The **ASI TVV020** is Designed for Television Band III Applications up to 225 MHz.

**FEATURES:**

- Common Emitter
- $P_G = 8.0$  dB at 20 W/225 MHz
- **Omnigold™** Metalization System

**MAXIMUM RATINGS**

$I_C$	8.0 A
$V_{CEO}$	35 V
$V_{CES}$	60 V
$V_{EBO}$	4.0 V
$P_{DISS}$	140 W @ $T_C = 25^\circ\text{C}$
$T_J$	$-65^\circ\text{C}$ to $+200^\circ\text{C}$
$T_{STG}$	$-65^\circ\text{C}$ to $+150^\circ\text{C}$
$\theta_{JC}$	$1.5^\circ\text{C/W}$

**PACKAGE STYLE .500 4L STUD**

DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	1.010 / 25.65	1.050 / 26.67
B	.220 / 5.59	.230 / 5.84
C	.495 / 12.57	.505 / 12.83
D	.003 / 0.08	.007 / 0.18
E	.160 / 4.06	.180 / 4.57
F	.622 / 15.80	
G	.100 / 2.54	.130 / 3.31
H	.415 / 10.54	.425 / 10.80
I	.720 / 18.29	
J	.250 / 6.35	.290 / 7.37

**ORDER CODE: ASI10659**

**CHARACTERISTICS**  $T_C = 25^\circ\text{C}$ 

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$BV_{CBO}$	$I_C = 50$ mA	65			V
$BV_{CER}$	$I_C = 50$ mA $R_{BE} = 10 \Omega$	60			V
$BV_{CEO}$	$I_C = 50$ mA	35			V
$BV_{EBO}$	$I_E = 10$ mA	4.0			V
$I_{CES}$	$V_{CB} = 50$ V			5.0	mA
$h_{FE}$	$V_{CE} = 5.0$ V $I_C = 1.0$ A	20		120	---
$C_{OB}$	$V_{CB} = 30$ V $f = 1.0$ MHz			85	pF
$P_G$ $IMD_3$	$V_{CE} = 25$ V $I_C = 2.5$ A $f = 225$ MHz $P_{OUT} = 20$ W	8.0 -51			dB dBc