

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

The **ASI TVV005** is Designed for Television Band III Applications up to 225 MHz.

**FEATURES:**

- Common Emitter
- $P_G = 15$  dB at 5.0 W/225 MHz
- **Omnigold™** Metalization System

**MAXIMUM RATINGS**

$I_C$	4.0 A
$V_{CBO}$	55 V
$V_{CEO}$	30 V
$V_{EBO}$	4.0 V
$P_{DISS}$	50 W @ $T_C = 25$ °C
$T_J$	-65 °C to +200 °C
$T_{STG}$	-65 °C to +200 °C
$\theta_{JC}$	3.5 °C/W

**PACKAGE STYLE .280 4L STUD**

DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	1.010 / 25.65	1.055 / 26.80
B	.220 / 5.59	.230 / 5.84
C	.270 / 6.86	.285 / 7.24
D	.003 / 0.08	.007 / 0.18
E	.117 / 2.97	.137 / 3.48
F	.572 / 14.53	
G	.130 / 3.30	
H	.245 / 6.22	.255 / 6.48
I	.640 / 16.26	
J	.175 / 4.45	.217 / 5.51
K	.275 / 6.99	.285 / 7.24

**ORDER CODE: ASI10654**

**CHARACTERISTICS**  $T_C = 25$  °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$BV_{CEO}$	$I_C = 50$ mA	30			V
$BV_{CER}$	$I_C = 20$ mA $R_{BE} = 10$ $\Omega$	55			V
$BV_{CBO}$	$I_C = 20$ mA	55			V
$BV_{EBO}$	$I_E = 2.0$ mA	4.0			V
$h_{FE}$	$V_{CE} = 5.0$ V $I_C = 100$ mA	10		---	---
$C_{OB}$	$V_{CB} = 28$ V $f = 1.0$ MHz			35	pF
$P_G$	$V_{CE} = 28$ V $P_{OUT} = 5.0$ W $I_C = 1.0$ A $f = 225$ MHz	15			dB
$IMD_1$	$V_{CE} = 28$ V $P_{OUT} = 5.0$ W $I_C = 1.0$ A $f = 225$ MHz Vision Carrier = -8 dB ref. Sound Carrier = -7 dB ref. Sideband Signal = -16 dB ref.	-55			dBc
$\Psi$	$V_{CE} = 28$ V $P_{OUT} = 5.0$ W $I_C = 1.0$ A $f = 225$ MHz Load VSWR = 00:1, All Phase Angles	No Degradation in Output Power			