

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI TVU0.5** is a gold metallized RF transistor designed for UHF linear applications for TV bands IV and V. It utilizes emitter ballasting for high linearity and ruggedness.

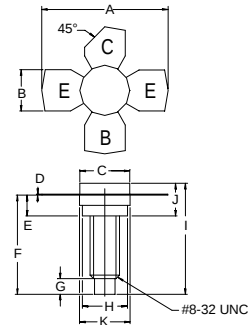
FEATURES:

- Common Emitter
- $P_G = 9.5$ dB at 0.5 W/ 860 MHz
- **Omnigold™** Metalization System

MAXIMUM RATINGS

I_C	2.0 A
V_{CBO}	45 V
V_{CEO}	25 V
V_{EBO}	3.5 V
P_{DISS}	31.8 W @ $T_C = 25^\circ\text{C}$
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +150 °C
θ_{JC}	5.5 °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: ASI10640

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

SYMBOL	TEST CONDITIONS		MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CBO}	$I_C = 1.0$ mA		45			V
BV_{CEO}	$I_C = 20$ mA		24			V
BV_{EBO}	$I_E = 0.25$ mA		3.5			V
I_{CBO}	$V_{CB} = 28$ V				0.45	mA
h_{FE}	$V_{CE} = 5.0$ V	$I_C = 100$ mA	15		120	---
C_{OB}	$V_{CB} = 28$ V	$f = 1.0$ MHz			5.0	pF
P_G	$V_{CE} = 20$ V	$I_C = 220$ mA	9.5			dB
IMD_1	$P_{OUT} = 0.5$ W	$P_{IN} = 50$ mW			-58	dBc

Conditions: $f_1 = 860$ MHz (-8 dBc), $f_2 = 863.5$ MHz (-16 dBc), $f_3 = 864.5$ MHz (-7 dBc)