NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

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

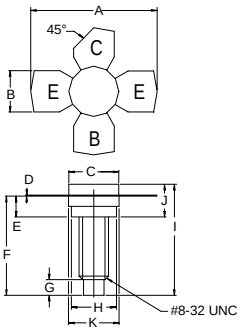
FEATURES:

- 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 °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 °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 f = 860 MHz	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)