

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI TVU0.5B** is Designed for Television Band IV & V Applications up to 860 MHz.

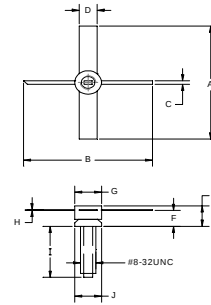
FEATURES:

- Common Emitter
- $P_G = 12$ 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 $+200^\circ\text{C}$
T_{STG}	-65°C to $+150^\circ\text{C}$
θ_{JC}	33 $^\circ\text{C/W}$

PACKAGE STYLE .205 4L STUD



DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.976 / 24.800	1.000 / 25.4000
B	.976 / 24.800	1.000 / 25.4000
C	.028 / 0.700	.031 / 0.800
D	.138 / 3.500	
E	.161 / 4.100	.196 / 5.000
F	.098 / 2.500	.110 / 2.800
G	.200 / 5.100	.208 / 5.300
H	.004 / 0.100	.006 / 0.150
I	.425 / 10.800	.465 / 11.800
J	.200 / 5.100	2.05 / 5.200

ORDER CODE: ASI10642

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

SYMBOL	TEST CONDITIONS		MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CBO}	$I_C = 1.0$ mA		45			V
BV_{CE}	$I_C = 20$ 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	---
P_G	$V_{CE} = 20$ V	$I_C = 150$ mA	12			dB
IMD_1	$P_{OUT} = 0.5$ W	$f = 860$ MHz	-58			dBc