

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

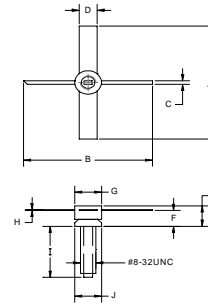
The **ASI TVU0.5B** is Designed for UHF and Television Band IV & V Applications.

**FEATURES:**

- Common Emitter
- $P_G = 12$  dB at 0.5 W/860 MHz
- **Omnigold™** Metalization System
- Emitter Ballasting.

**MAXIMUM RATINGS**

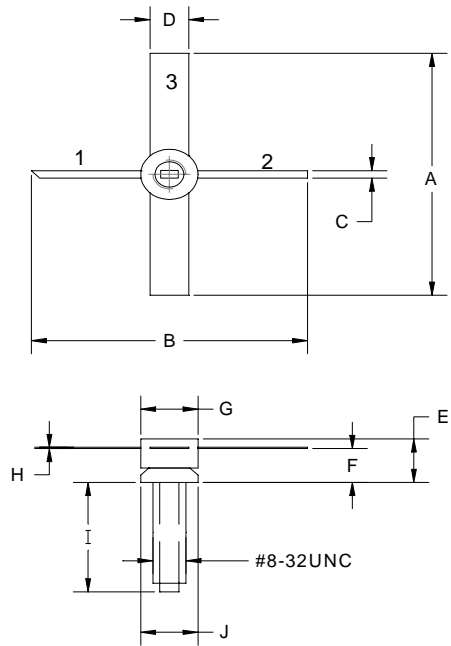
$I_C$	2.0 A
$V_{CBO}$	45 V
$V_{CEO}$	25 V
$V_{EBO}$	3.5 V
$P_{DISS}$	31.8 W
$T_J$	-65 °C to +200 °C
$T_{STG}$	-55 °C to +150 °C

**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	---
$P_G$ $IMD_1$	$V_{CE} = 20$ V $I_C = 150$ mA $f = 860$ MHz $P_{OUT} = 0.5$ W $f_1 = 860$ MHz ( 08 dBc), $f_2 = 863.5$ MHz (-16 dBc), $f_3 = 864.5$ MHz (-7dBc)	12 -58			dB dBc



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**1 = Collector    2 = Base    3 = Emitter**