

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

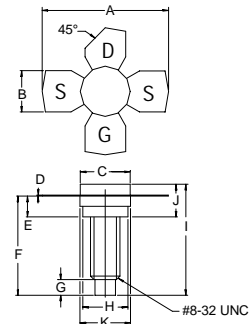
The **ASI TVU002** is a common Emitter device especially designed for Class-A applications in UHF frequency range and TV band IV & V. Gold metalization & Emitter Ballasting assure high reliability & ruggedness.

**FEATURES:**

- Common Emitter – Class-A
- $P_G = 8.5$  dB at 2.0 W/860 MHz
- **Omnigold™** Metalization System
- Emitter Ballasting

**MAXIMUM RATINGS**

$I_C$	800 mA
$V_{CBO}$	45 V
$V_{EBO}$	4.0 V
$P_{DISS}$	15.9 W @ $T_C = 25$ °C
$T_J$	-65 °C to +200 °C
$T_{STG}$	-65 °C to +150 °C
$\theta_{JC}$	11 °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: ASI10644**
**CHARACTERISTICS**  $T_C = 25$  °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$BV_{CBO}$	$I_C = 10$ Ma	45			V
$BV_{CEO}$	$I_C = 80$ mA	25			V
$BV_{EBO}$	$I_E = 1.0$ mA	4.0			V
$I_{CBO}$	$V_{CB} = 28$ V			0.45	mA
$h_{FE}$	$V_{CE} = 20$ V $I_C = 250$ mA	10		100	---
$C_{OB}$	$V_{CB} = 25$ V $f = 1.0$ MHz			10	pF
$P_G$ $IMD_1$	$V_{CE} = 25$ V $I_C = 450$ mA $P_{OUT} = 2.0$ W $f_1 = 860$ MHz, $f_2 = 863.5$ MHz, $f_3 = 864.5$ MHz Vision = -8 dB,      sideband = -16 dB,      sound = -7 db	25	-60		dB dBc