

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI TVU020** is Designed for Television Band IV & V Applications up to 860 MHz.

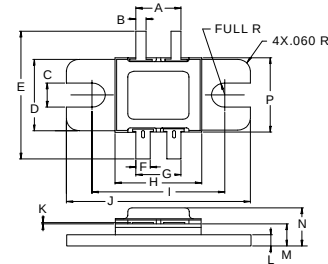
FEATURES:

- Common Emitter
- $P_E = 8.5$ dB at 20 W/860 MHz
- **Omnigold™** Metalization System

MAXIMUM RATINGS

I_C	11.0 A
V_{CBO}	60 V
V_{CES}	60 V
V_{EBO}	4.0 V
P_{DISS}	88.8 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}	1.2 $^\circ\text{C/W}$

PACKAGE STYLE .400 BAL FLG(A)



DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.210 / 5.33	.230 / 5.84
B	.045 / 1.14	.055 / 1.40
C	.125 / 3.18	.135 / 3.43
D	.380 / 9.65	.390 / 9.91
E	.770 / 19.56	.830 / 21.08
F	.070 / 1.78	.080 / 2.03
G	.215 / 5.46	.235 / 5.97
H	.420 / 10.67	.430 / 10.92
I	.645 / 16.38	.655 / 16.64
J	.895 / 22.73	.905 / 22.99
K	.002 / 0.05	.006 / 0.15
L	.058 / 1.47	.065 / 1.65
M	.115 / 2.92	.130 / 3.30
N		.230 / 5.84
P	.395 / 10.03	.405 / 10.29

ORDER CODE: ASI10648

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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CEO}	$I_C = 50$ mA	28			V
BV_{CES}	$I_C = 50$ mA	60			V
BV_{EBO}	$I_E = 10$ mA	3.0			V
I_{CEO}	$V_{CE} = 26.5$ V	---		5.0	mA
h_{FE}	$V_{CE} = 5.0$ V $I_C = 3.0$ A	25	50	80	---
P_G IMD_3 IP_3	$V_{CE} = 26.5$ V $P_{OUT} = 20$ W $f = 860$ MHz $I_C = 2 \times 1350$ mA	9.5 -46	55		dB dBc dBm
LOAD MISMATCH	$V_{CE} = 26.5$ V $P_{OUT} = 20$ W $f = 860$ MHz	3:1	10:1		VSWR