NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI TVU020** is a common emitter RF bipolar transistor capable of providing 20 W peak, Class-A, RF power output over 470-860 MHz. It utilizes emitter ballasting & input impedance matching to provide broadband performance.

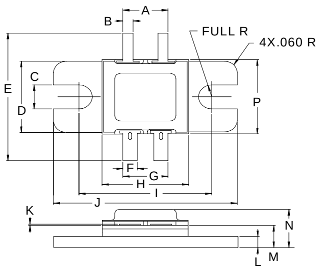
FEATURES:

- 470-860 MHz
- Common Emitter
- **P_G** = 8.5 dB at 20 W/860 MHz
- ***Omnigold***™ Metalization System
- InPut bradband matching

MAXIMUM RATINGS

I_C	4.5 A
V_{CEO}	28 V
V_{CES}	50 V
V_{EBO}	4.0 V
P_{DISS}	80 W @ T_C = 25 °C
T_J	-65°C to +200°C
T_{STG}	-65 °C to +150 °C
θ_{JC}	1.2 °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 °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CEO}	I_C = 40 mA	28			**V**
BV_{CES}	I_C = 20 mA	50			**V**
BV_{EBO}	I_E = 10 mA	4.0			**V**
I_{CEO}	V_{CE} = 26.5 V	---		5.0	**mA**
h_{FE}	V_{CE} = 5.0 V I_C = 1.0 A	10		150	**---**
P_G **IMD_3**	V_{CE} = 26.5 V P_{OUT} = 20 W f = 470-860 MHz I_C = 2 X 1350 Ma P_{IN} = 2.8 W	8.5 -46	9.5 -48	 -46	**dB** **dBc**

LOAD MISMATCH	V_{CE} = 26.5 V	P_{OUT} = 20 W	f = 860 MHz			3:1	**VSWR**