

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

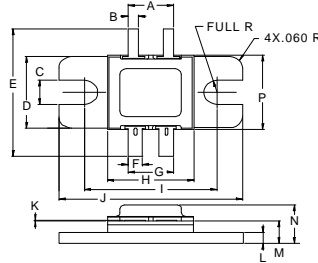
The **ASI TVU020** is Designed for

**FEATURES:**

- Input Matching Network
- **Omnigold™** Metalization System

**MAXIMUM RATINGS**

$I_C$	11.0 A
$V_{CB0}$	60 V
$V_{CES}$	60 V
$V_{EBO}$	4.0 V
$P_{DISS}$	88.8 W @ $T_C = 25\text{ }^\circ\text{C}$
$T_J$	-65 $^\circ\text{C}$ to +200 $^\circ\text{C}$
$T_{STG}$	-65 $^\circ\text{C}$ to +150 $^\circ\text{C}$
$\theta_{JC}$	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**  $T_C = 25\text{ }^\circ\text{C}$ 

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$BV_{CEO}$	$I_C = 50\text{ mA}$	28			V
$BV_{CES}$	$I_C = 50\text{ mA}$	60			V
$BV_{EBO}$	$I_E = 10\text{ mA}$	3.0			V
$I_{CEO}$	$V_{CE} = 26.5\text{ V}$	---		5	mA
$h_{FE}$	$V_{CE} = 5.0\text{ V}$ $I_C = 3.0\text{ A}$	25	50	80	---
$P_G$ $IMD_3$ $IP_3$	$V_{CE} = 26.5\text{ V}$ $P_{OUT} = 20\text{ W}$ $f = 860\text{ MHz}$ $I_C = 2 \times 1350\text{ mA}$	9.5 -46	55		dB dBc dBm
<b>LOAD MISMATCH</b>	$V_{CE} = 26.5\text{ V}$ $P_{OUT} = 20\text{ W}$ $f = 860\text{ MHz}$	3:1	10:1		VSWR