

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI TVU150** is Designed for Television Band IV & V Applications up to 860 MHz.

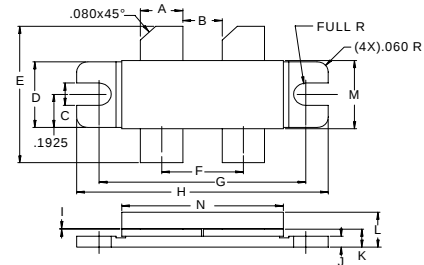
FEATURES:

- Common Emitter
- $P_G = 10 \text{ dB}$ at 150 W/860 MHz
- **Omnigold™** Metalization System

MAXIMUM RATINGS

I_C	25 A
V_{CEO}	28 V
V_{CES}	60 V
V_{EBO}	3.5 V
P_{DISS}	300 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}	0.55°C/W

PACKAGE STYLE .400 BAL FLG(C)



DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.220 / 5.59	.230 / 5.84
B	.210 / 5.33	
C	.120 / 3.05	.130 / 3.30
D	.380 / 9.65	.390 / 9.91
E	.780 / 19.81	.820 / 20.83
F	.435 / 11.05	
G	1.090 / 27.69	
H	1.335 / 33.91	1.345 / 34.16
I	.003 / 0.08	.007 / 0.18
J	.060 / 1.52	.070 / 1.78
K	.082 / 2.08	.100 / 2.54
L		.205 / 5.21
M	.395 / 10.03	.407 / 10.34
N	.850 / 21.59	.870 / 22.10

ORDER CODE: ASI10652

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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CEO}	$I_C = 100 \text{ mA}$	26	30		V
BV_{CER}	$I_C = 100 \text{ mA}$ $R_{BE} = 200 \Omega$	35	40		V
BV_{CES}	$I_C = 50 \text{ mA}$	60	80		V
BV_{EBO}	$I_E = 10 \text{ mA}$	3.5	4.0		V
I_{CES}	$V_{CE} = 30 \text{ V}$			10	mA
h_{FE}	$V_{CE} = 5.0 \text{ V}$ $I_C = 1.0 \text{ A}$	30	45	120	---
C_{OB}	$V_{CB} = 26 \text{ V}$ $f = 1.0 \text{ MHz}$		75		pF
P_G IMD_1	$V_{CC} = 26 \text{ V}$ $I_{CQ} = 2 \times 3000 \text{ mA}$ $f = 860 \text{ MHz}$ $P_{OUT} = 40 \text{ W}$	11 -52	9.0		dB dBc
Load Mismatch	$V_{CC} = 26 \text{ V}$ $I_{CQ} = 2 \times 150 \text{ mA}$ $P_{OUT} = 150 \text{ W PEP}$ $VSWR = 5:1$ @ all phase angles	No Degradation in Output Power			