

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **TVU150** is a Common Emitter Device Designed for Class A and AB Amplifier Applications in Band IV-V TV Transmitters.

FEATURES INCLUDE :

- Gold Metalization
- Internal Matching
- Emitter Ballasting

MAXIMUM RATINGS

I_C	20 A
V_{CB}	65 V
P_{DISS}	330 W @ T _C = 25 °C
T_J	-55 °C to +200 °C
T_{STG}	-55 °C to +150 °C
q_{JC}	0.55 °C/W

PACKAGE STYLE .400 BAL FLG.(C)

	MINIMUM Inches/mm	MAXIMUM Inches/mm		MINIMUM Inches/mm	MAXIMUM Inches/mm
A	.220/5.59	.230/5.84	K	.082/2.08	.100/2.54
B	.210/5.33		L	.205/5.21	
C	.125/3.18		M	.395/10.03	
D	.380/9.65	.390/9.91	N	.850/21.59	
E	.580/14.73	.620/15.75			
F	.435/11.03				
G	1.090/27.69	1.105/28.07			
H	1.335/33.91	1.345/34.16			
I	.003/0.08	.007/0.18			
J	.660/1.68	.070/1.78			

1 = COLLECTOR #1 3 = BASE #1
 6 = COLLECTOR #2 4 = BASE #2
 2 & 5 = EMITTER

CHARACTERISTICS T_C = 25 °C

SYMBOL	TEST CONDITIONS			MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CEO}	I _C = 100 mA	(per side)		25			V
BV_{CES}	I _C = 100 mA	(per side)		55			V
BV_{EBO}	I _E = 5.0 mA	(per side)		3.5			V
h_{FE}	V _{CE} = 5.0 V	I _C = 1.0 A	(per side)	20		100	---
C_{OB}	V _{CB} = 28 V	f = 1.0 MHz	(per side)		75		pF
P_G	V _{CE} = 26.5 V	I _C = 2 x 3.0 A	P _{OUT} = 40.0 W	11	11.5		dB
IMD₃	Vision = -8.0 dB	Sound = -10 dB	Chroma = -16 dB			-60	dBc
P_G	V _{CE} = 28 V	I _C = 2 x 150 mA	P _{OUT} = 150 W	10	11		dB
IMD₃	Vision = -8.0 dB	Sound = -10 dB	Chroma = -16 dB		-47		dBc



Z - PARAMETERS

$V_{CE} = 28$ Volts, $I_{CQ} = 2 \times 150$ Ma
 $P_{OUT} = 150 W_{PKSYNC}$

FREQ. MHz	Z SOURCE		Z LOAD	
	R	Jx	R	Jx

470	0.4	-1.0	2.0	0.3
550	0.5	-1.3	1.6	0.0
650	0.7	-1.8	1.3	0.0
750	1.8	-2.0	1.0	-0.8
860	2.7	-0.5	0.9	-1.2