TPV5051

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **TPV5051** is Designed for AB Push Pull, Common Emitter from 470 to 860 MHz Applications.

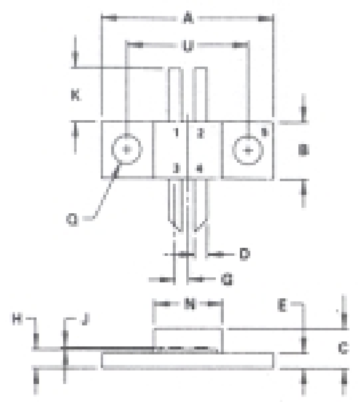
FEATURES:

- Gold Metalization
- Diffused Ballast Resistor

MAXIMUM RATINGS

I_C	9.0 A
V_{CEO}	30 V
V_{CBO}	45 V
P_{DISS}	97 W @ T_C = 25 °C
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +150 °C
θ_{JC}	1.8 °C/W

PACKAGE STYLE BMA-2



1 = BASE 2 = BASE 3 = COLLECTOR
4 = COLLECTOR 5 = EMITTER

DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	20.07	20.57	0.790	0.810
B	6.35	6.85	0.250	0.270
C	4.20	5.02	0.165	0.198
D	1.40	1.65	0.055	0.065
E	1.40	1.65	0.055	0.065
G	1.27	1.77	0.060	0.070
H	1.34	2.43	0.076	0.096
J	0.08	0.12	0.003	0.005
K	4.83	5.33	0.190	0.210
N	6.56	6.80	0.258	0.268
Q	3.18	3.42	0.125	0.135
U	14.03	14.52	0.552	0.572

CHARACTERISTICS T_C = 25 °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CEO}	I_C = 60 mA	30			**V**
BV_{CBO}	I_C = 20 mA	45			**V**
BV_{EBO}	I_E = 6.0 mA	4.0			**V**
BV_{CER}	I_C = 10 mA R_{BE} = 50 Ω	40			**V**
I_{CEO}	V_{CE} = 28 V			10	**mA**
h_{FE}	V_{CE} = 20 V I_C = 800 mA	10			**---**
C_{ob}	V_{CB} = 28 V f = 1.0 MHz (EACH SIDE)			40	**pF**
P_G **η_C**	V_{CE} = 28 V P_{out} = 50 W Iq = 2X50 mA f = 860 MHz	6.5 45			**dB** **%**