

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

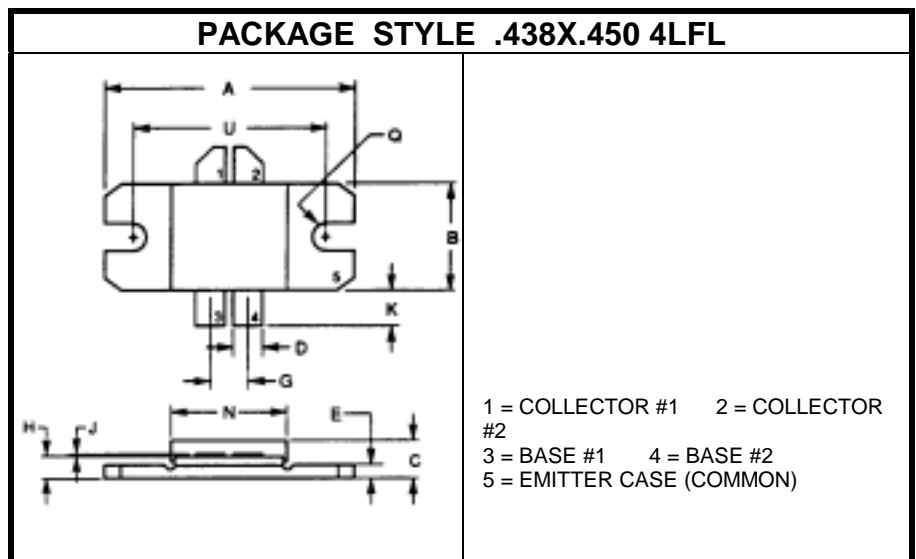
The **ASI TPV8100** is Designed for Transmitter Output Stages Covering TV Band IV and V, Operating at 28 V.

FEATURES INCLUDE:

- Internal Input, Output Matching
- Common Emitter Configuration
- Gold Metalization
- Emitter Ballasting

MAXIMUM RATINGS

I_C	12 A
V_{CER}	40 V R _{BE} = 10 Ω
P_{DISS}	215 W @ T _C = 25 °C
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +150 °C
θ_{JC}	0.8 °C/W


CHARACTERISTICS T_C = 25 °C

SYMBOL	TEST CONDITIONS			MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CER}	I _C = 10 mA	R _{BE} = 75 Ω		30			V
BV_{CBO}	I _C = 20 mA			65			V
BV_{EBO}	I _E = 10 mA			4.0			V
I_{CER}	V _{CE} = 28 V	R _{BE} = 75 Ω				10	mA
h_{FE}	V _{CE} = 10 V	I _C = 2.0 A		30		120	---
G_p	V _{CE} = 28 V	I _{cq} = 2X50 mA	f = 860 MHz	8.5			dB
η	V _{CE} = 28 V	I _{cq} = 2X50 mA	f = 860 MHz	55			%
P_{out}	V _{CE} = 28 V	I _{cq} = 2X50 mA	f = 860 MHz	100			W
	1.0 dB COMPRESSION (ref = 25 W)						

FUNCTIONAL TESTS IN VIDEO (STANDARD BLACK LEVEL)

P_{out}	V _{CE} = 28 V	I _{cq} = 2X50 mA	f = 860 MHz	125			W
P_{out}	V _{CE} = 32 V	I _{cq} = 2X25 mA	f = 860 MHz	150			W