

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

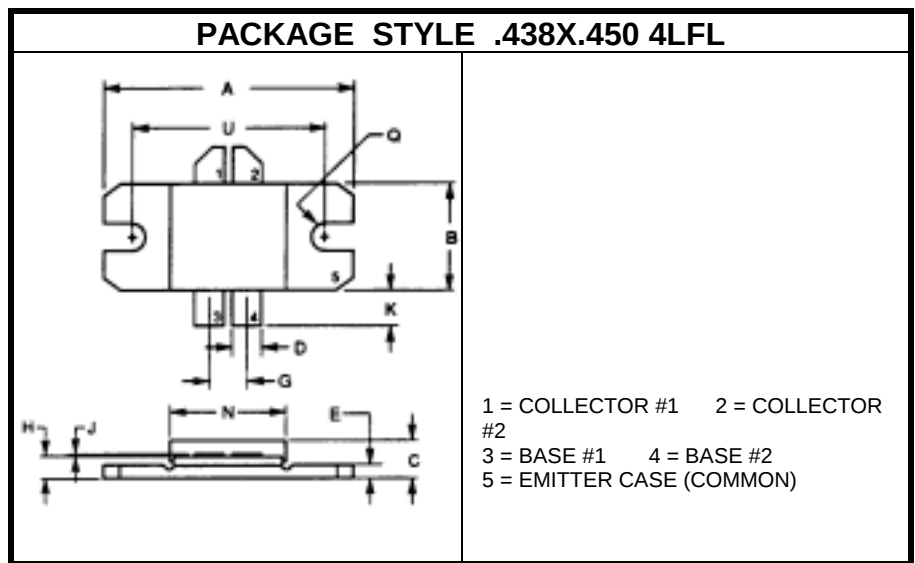
The **ASI TPV8100B** is Designed for Transmitter Output Stages Covering TV Band IV and V, Operating at 28 V.

FEATURES INCLUDE:

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

MAXIMUM RATINGS

I_C	12 A
V_{CER}	40 V $R_{BE} = 10 \Omega$
P_{DISS}	215 W @ $T_C = 25^\circ C$
T_J	$-65^\circ C$ to $+200^\circ C$
T_{STG}	$-65^\circ C$ to $+150^\circ C$
θ_{JC}	$0.8^\circ C/W$



CHARACTERISTICS $T_C = 25^\circ C$

SYMBOL	TEST CONDITIONS		MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CER}	$I_C = 10$ mA	$R_{BE} = 75 \Omega$	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	$R_{BE} = 75 \Omega$			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