

SILICON NPN RF POWER TRANSISTOR

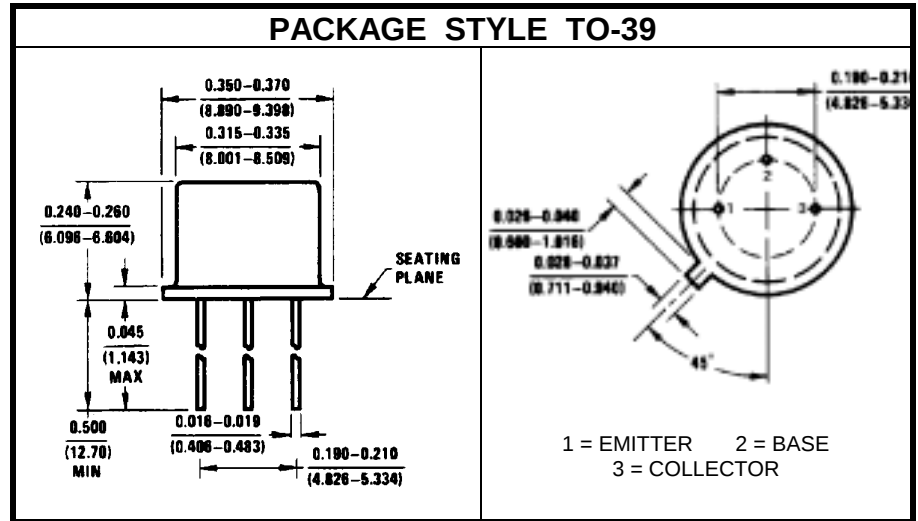
DESCRIPTION: The ASI SD1444 is designed for large signal power amplifier applications operating in the 250-512 MHz range.

FEATURES:

- Common Emitter
- $P_{OUT} = 4.0$ Watts
- 12.5 Volts

MAXIMUM RATINGS:

I_C	0.4 A
V_{CB}	36 V
V_{CE}	16 V
P_{DISS}	5.0 W @ $T_C = 25^\circ\text{C}$
T_J	-65°C to $+200^\circ\text{C}$
T_{STG}	-65°C to $+200^\circ\text{C}$
θ_{JC}	35.0°C/W



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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CEO}	$I_C = 50$ mA	16			V
BV_{CES}	$I_C = 50$ mA	36			V
BV_{EBO}	$I_C = 1.0$ mA	4.0			V
I_{CBO}	$V_{CE} = 15$ V			1.0	mA
H_{FE}	$V_{CE} = 5.0$ V $I_C = 50$ mA	20		200	---
C_{OB}	$V_{CB} = 15.0$ V $f = 1.0$ MHz			15	pF
G_{PE}	$V_{CE} = 12.5$ V $P_{OUT} = 2.0$ W $f = 470$ MHz	8.0	15		dB

IMPEDANCE DATA

FREQ	$Z_{IN}(\Omega)$	$Z_{CL}(\Omega)$
470 MHz	$2.9 + j0.6$	$15.6 - j10.2$

$P_{OUT} = 2.0$ W

$V_{CC} = 12.5$ V

ADVANCED SEMICONDUCTOR, INC.

7525 ETHEL AVENUE • NORTH HOLLYWOOD, CA 91605 • (818) 982-1202 • FAX (818) 765-3004

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Specifications are subject to change without notice.