

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

The **ASI VHB25-28S** is an NPN power transistor, designed 108-175 MHz applications. The device utilizes diffused emitter resistors to achieve good VSWR capability

**FEATURES:**

- Common Emitter-Class-C
- $P_G = 10$  dB at 30 W/150 MHz
- **Omnigold™** Metalization System

**MAXIMUM RATINGS**

$I_C$	4.0 A
$V_{CB0}$	36 V
$V_{CEO}$	18 V
$V_{EBO}$	4.0 V
$P_{DISS}$	40 W @ $T_C = 25$ °C
$T_J$	-65 °C to +200 °C
$T_{STG}$	-65 °C to +150 °C
$\theta_{JC}$	4.4 °C/W

**PACKAGE STYLE .380 4L STUD**

DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.220 / 5.59	.230 / 5.84
B	.980 / 24.89	
C	.370 / 9.40	.385 / 9.78
D	.004 / 0.10	.007 / 0.18
E	.320 / 8.13	.330 / 8.38
F	.100 / 2.54	.130 / 3.30
G	.450 / 11.43	.490 / 12.45
H	.090 / 2.29	.100 / 2.54
I	.155 / 3.94	.175 / 4.45
J		.750 / 19.05

**ORDER CODE: ASI10725**

**CHARACTERISTICS**  $T_C = 25$  °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$BV_{CEO}$	$I_C = 200$ mA	35			V
$BV_{CES}$	$I_C = 200$ mA	65			V
$BV_{EBO}$	$I_E = 10$ mA	4.0			V
$I_{CB0}$	$V_{CB} = 30$ V			2.0	mA
$h_{FE}$	$V_{CE} = 5.0$ V $I_C = 200$ mA	35		---	---
$C_{OB}$	$V_{CB} = 28$ V $f = 1.0$ MHz			250	pF
$P_G$ $\eta_c$	$V_{CC} = 28$ V $P_{OUT} = 25$ W $f = 175$ MHz	8.5	60		dB %