

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

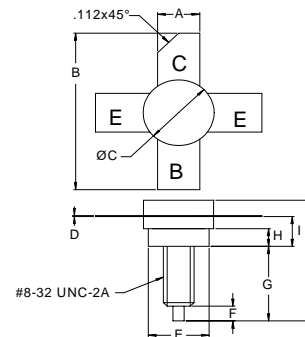
The **ASI VHB50-28S** is Designed for Class C, 28 V High Band Applications up to 175 MHz.

**FEATURES:**

- Common Emitter
- $P_G = 6.0$  dB at 50 W/175 MHz
- **Omnigold™** Metalization System

**MAXIMUM RATINGS**

$I_C$	6.5 A
$V_{CB0}$	65 V
$V_{CEO}$	35 V
$V_{EBO}$	4.0 V
$P_{DISS}$	75W
$T_J$	-65 °C to +200 °C
$T_{STG}$	-65 °C to +150 °C
$\theta_{JC}$	2.3 °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: ASI10730**
**CHARACTERISTICS**  $T_C = 25\text{ °C}$ 

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
$I_{CES}$	$V_{CE} = 30$ V $T_C = 125\text{ °C}$					10	mA
$h_{FE}$	$V_{CE} = 5.0$ V	$I_C = 500$ mA		5.0		---	---
$C_{ob}$	$V_{CB} = 28$ V		$f = 1.0$ MHz			80	pF
$f_T$	$V_{CE} = 10$ V	$I_C = 500$ mA	$f = 100$ MHz	200			MHz
$P_G$ $\eta_c$	$V_{CE} = 28$ V	$P_{OUT} = 50$ W	$f = 175$ MHz	6.0	60		dB %