

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI VHB40-12S** is Designed for Class C, 12.5 V High Band Applications up to 175 MHz.

FEATURES:

- Common Emitter
- $P_G = 8.5$ dB at 40 W/175 MHz
- **Omnigold™** Metalization System

MAXIMUM RATINGS

I_C	5.0 A
V_{CBO}	36 V
V_{CEO}	18 V
V_{EBO}	4.0 V
P_{DISS}	70 W @ $T_C = 25$ °C
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +150 °C
θ_{JC}	2.9 °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: ASI10717

CHARACTERISTICS $T_C = 25$ °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CBO}	$I_C = 50$ mA	36			V
BV_{CES}	$I_C = 50$ mA	36			V
BV_{CEO}	$I_C = 50$ mA	18			
BV_{EBO}	$I_E = 10$ mA	4.0			V
I_{CES}	$V_{CE} = 28$ V			5.0	mA
h_{FE}	$V_{CE} = 5.0$ V $I_C = 5.0$ A	20		200	---
C_{ob}	$V_{CB} = 12.5$ V $f = 1.0$ MHz			135	pF
G_P η_c	$V_{CC} = 12.5$ V $P_{OUT} = 40$ W $f = 175$ MHz	8.5	60		dB %