

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI VHB10-28S** is an NPN power transistor designed for 138-175 MHz VHF communications. It utilizes emitter ballasting to provide high VSWR handling capability.

FEATURES:

- Common Emitter, 28 V operation
- $P_G = 10$ dB at 10W/175 MHz
- **Omnigold™** Metalization System
- High VSWR capability

MAXIMUM RATINGS

I_C	1.0 A
V_{CBO}	65 V
V_{CEO}	35 V
V_{EBO}	4.0 V
P_{DISS}	13.0 W
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +150 °C
θ_{JC}	13.5 °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: ASI10723

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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CBO}	$I_C = 200$ mA	65			V
BV_{CES}	$I_C = 200$ mA	65			V
BV_{CEO}	$I_C = 200$ mA	35			V
BV_{EBO}	$I_E = 10$ mA	4.0			V
I_{CBO}	$V_{CB} = 30$ V			1.0	mA
h_{FE}	$V_{CE} = 5.0$ V $I_C = 200$ mA	5.0		200	---
C_{ob}	$V_{CB} = 30$ V $f = 1.0$ MHz			15	pF
P_G η_c	$V_{CC} = 28$ V $P_{OUT} = 10$ W $f = 175$ MHz $P_{IN} = 1.0$ W	10	60		dB %