

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI VHB25-28F** is an NPN power transistor, designed for 108-175 MHz applications. The device utilizes diffused emitter resistor 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_{CBO}	65 V
V_{EBO}	4.0 V
V_{CEO}	35 V
P_{DISS}	40 W @ $T_C = 25$ °C
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +150 °C
θ_{JC}	4.4 °C/W

PACKAGE STYLE .380 4L FLG

DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.220 / 5.59	.230 / 5.84
B	.785 / 19.94	
C	.720 / 18.29	.730 / 18.54
D	.970 / 24.64	.980 / 24.89
E		.385 / 9.78
F	.004 / 0.10	.006 / 0.15
G	.085 / 2.16	.105 / 2.67
H	.160 / 4.06	.180 / 4.57
I		.280 / 7.11
J	.240 / 6.10	.255 / 6.48

ORDER CODE: ASI10724

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_{CBO}	$V_{BE} = 30$ V					2.0	mA
h_{FE}	$V_{CE} = 5.0$ V	$I_C = 200$ mA		35.0		---	---
C_{ob}	$V_{CB} = 28$ V	$f = 1.0$ MHz				250	pF
f_T	$V_{CE} = 28$ V	$I_C = 200$ mA	$f = 100$ MHz	50			MHz
P_G η_c	$V_{CC} = 28$ V	$P_{OUT} = 25$ W		8.5	60		dB %