

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI VMB40-12F** is Designed for 12.5 V, Medium Band Class C Applications.

FEATURES:

- Common Emitter
- $P_G = 10 \text{ dB @ } 40\text{W}/175\text{MHz}$
- **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 @ $T_C = 25^\circ\text{C}$
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +150 °C
θ_{JC}	2.5 °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: ASI10743

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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CBO}	$I_C = 50 \text{ mA}$	36			V
BV_{CES}	$I_C = 50 \text{ mA}$	36			V
BV_{CEO}	$I_C = 50 \text{ mA}$	18			V
BV_{EBO}	$I_E = 10 \text{ mA}$	4.0			V
I_{CES}	$V_{CE} = 12.5 \text{ V}$			5.0	mA
h_{FE}	$V_{CE} = 5.0 \text{ V}$ $I_C = 5.0 \text{ A}$	20		200	---
C_{OB}	$V_{CB} = 12.5 \text{ V}$ $f = 1.0 \text{ MHz}$			165	pF
P_G η_C	$V_{CC} = 12.5 \text{ V}$ $P_{OUT} = 40 \text{ W}$ $f = 88 \text{ MHz}$	10	60		dB %