

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI BAM120** is Designed to operate in a collector modulated VHF Power Amplifier Applications up to 150 MHz.

FEATURES:

- $\eta_C = 65\%$ typ. @ 120 W/150 MHz
- $P_G = 9.0$ dB typ. @ 120 W/150 MHz
- **Omnigold™** Metalization System

MAXIMUM RATINGS

I_C	12 A
V_{CES}	60 V
V_{EBO}	4.0 V
P_{DISS}	140 W @ $T_C = 25^\circ C$
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +150 °C
θ_{JC}	1.2 °C/W

PACKAGE STYLE .500 4L FLG

1 = COLLECTOR 2 = BASE
3 & 4 = EMITTER

	MINIMUM Inches/mm	MAXIMUM Inches/mm
A	.220/5.59	.230/5.84
B	.125/3.18	
C	.245/6.22	.255/6.48
D	.720/18.28	.730/18.54
E	.125/3.18	
F	.970/24.64	.980/24.89
G	.495/12.57	.505/12.83
H	.003/0.08	.007/0.18
I	.090/2.29	.110/2.79
J	.160/4.06	.175/4.43
K		.280/7.11
L		1.050/26.67

ORDER CODE: ASI10430

CHARACTERISTICS $T_C = 25^\circ C$

SYMBOL	TEST CONDITIONS		MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CES}	$I_C = 20$ mA		60			V
BV_{CEO}	$I_C = 50$ mA		32			V
BV_{EBO}	$I_E = 5.0$ mA		4.0			V
h_{FE}	$V_{CE} = 25$ V	$I_C = 3.5$ A	15		100	---
C_{OB}	$V_{CE} = 27$ V	$f = 1.0$ MHz		240		pF
P_G	$V_{CC} = 27$ V	$P_{OUT} = 120$ W		9.0		dB
η_C	$V_{CC} = 27$ V	$P_{OUT} = 120$ W		65		%