

# 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 @ $T_C = 25^\circ\text{C}$
$T_J$	$-65^\circ\text{C}$ to $+200^\circ\text{C}$
$T_{STG}$	$-65^\circ\text{C}$ to $+150^\circ\text{C}$
$\theta_{JC}$	1.2 $^\circ\text{C}/\text{W}$

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

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
$\eta_C$	$V_{CC} = 27$ V	$P_{OUT} = 120$ W		65		%