

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

The **ASI ASAT30** is Designed for General Purpose Class C Operation up to 1.7 GHz.

**FEATURES:**

- Internal Input/Output Matching Network
- $P_G = 9.0$  dB at 30 W/1.7 GHz
- **Omnigold™** Metalization System

**MAXIMUM RATINGS**

$I_C$	10 A
$V_{CB}$	60 V
$V_{CE}$	35 V
$P_{DISS}$	140 W @ $T_C = 25$ °C
$T_J$	-65 °C to +200 °C
$T_{STG}$	-65 °C to +150 °C
$\theta_{JC}$	3.5 °C/W

**PACKAGE STYLE .250 2L FLG(A)**

DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.055 / 1.40	.065 / 1.65
B	.124 / 3.15	
C	.243 / 6.17	.253 / 6.43
D	.635 / 16.13	.665 / 16.89
E	.555 / 14.10	.565 / 14.35
F	.739 / 18.77	.749 / 19.02
G	.315 / 8.00	.325 / 8.26
H	.002 / 0.05	.006 / 0.15
I	.055 / 1.40	.065 / 1.65
J	.075 / 1.91	.095 / 2.41
K		.190 / 4.83
L	.245 / 6.22	.255 / 6.48
M	.092 / 2.34	

**ORDER CODE: ASI10521**

**CHARACTERISTICS**  $T_C = 25$  °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$BV_{CEO}$	$I_C = 50$ mA	35			V
$BV_{CER}$	$I_C = 50$ mA $R_{BE} = 10$ Ω	60			V
$BV_{EBO}$	$I_E = 10$ Ma	4.0			V
$I_{CES}$	$V_E = 28$ V			5	mA
$h_{FE}$	$V_{CE} = 5.0$ V $I_C = 1.0$ A	10		100	---
$P_{GE}$	$V_{CC} = 28$ V $P_{OUT} = 30$ W $f = 1.7$ GHz	9.0			dB
$\eta_C$		50			%