

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

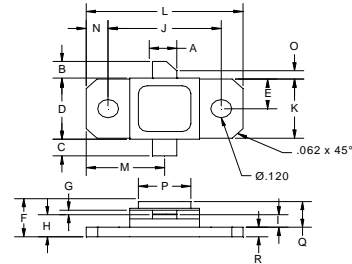
The **ASI AJT030** is a Class-c RF power transistor, designed for JTIDS pulsed output & driver applications from 960 to 1215 MHz.

**FEATURES:**

- Internal Input/Output Matching Network
- $P_G = 7.8$  dB at 30 W/ 1215 MHz
- **Omnigold™** Metalization System

**MAXIMUM RATINGS**

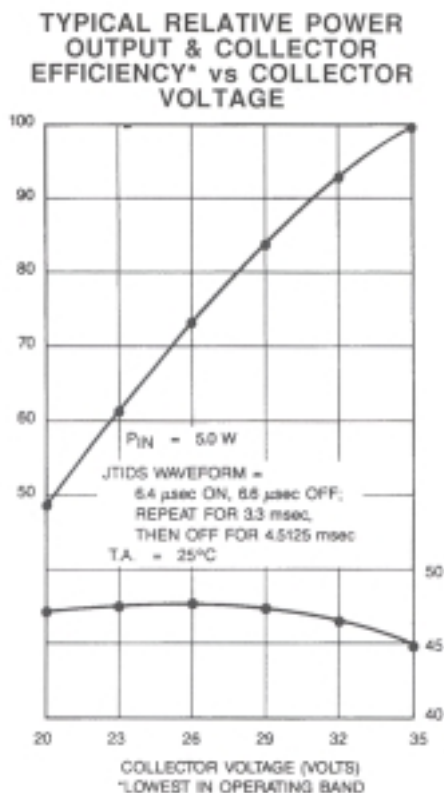
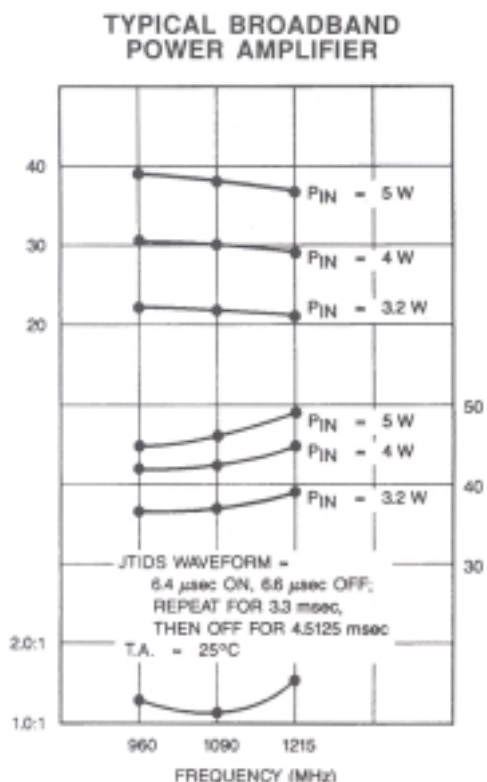
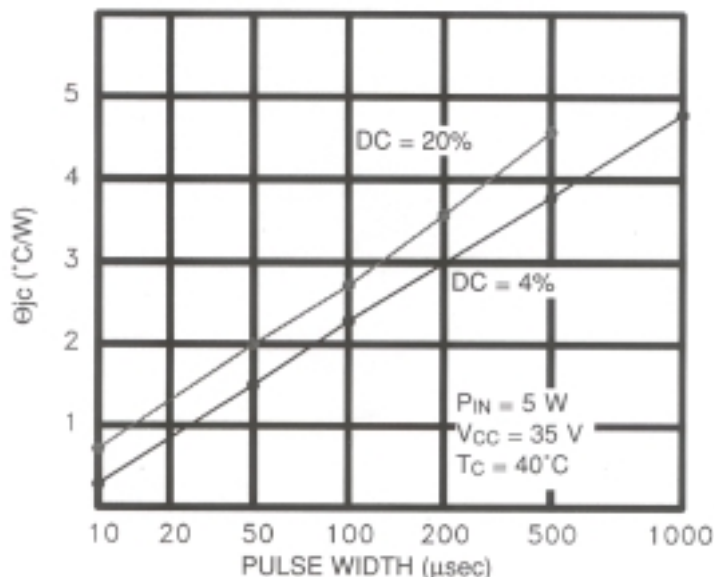
$I_C$	3.5 A
$V_{CC}$	40 V
$P_{DISS}$	75 W @ $T_C \leq 85$ °C
$T_J$	-65 °C to +250 °C
$T_{STG}$	-65 °C to +200 °C
$\theta_{JC}$	2.2 °C/W

**PACKAGE STYLE .400 2L FLG**


DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.140 / 3.56	
B	.110 / 2.80	
C	.110 / 2.80	
D	.395 / 10.03	.407 / 10.34
E	.193 / 4.90	
F		.230 / 5.84
G	.003 / 0.08	.006 / 0.15
H	.118 / 3.00	.131 / 3.33
I	.063 / 1.60	
J	.650 / 16.51	
K	.386 / 9.80	
L	.900 / 22.86	
M	.450 / 11.43	
N	.125 / 3.18	
O	.050 / 1.27	
P	.405 / 10.29	
Q	.170 / 4.32	
R	.062 / 1.58	

**ORDER CODE: ASI10546**
**CHARACTERISTICS**  $T_C = 25$  °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$BV_{CBO}$	$I_C = 10$ mA	55			V
$BV_{CER}$	$I_C = 20$ mA $R_{BE} = 10$ Ω	55			V
$BV_{EBO}$	$I_E = 1.0$ mA	3.5			V
$I_{CES}$	$V_{CE} = 35$ V			5.0	mA
$h_{FE}$	$V_{CE} = 5.0$ V $I_C = 1.0$ A	15		150	---
$P_G$	$V_{CC} = 35$ V $P_{OUT} = 30$ W $f = 960 - 1215$ MHz	7.8	8.6		dB
$\eta_c$	$P_{IN} = 5.0$ W	40	45		%

**TYPICAL PERFORMANCE**

**MAXIMUM THERMAL RESISTANCE vs PULSE WIDTH & DUTY CYCLE**


TEST CIRCUIT

