

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI AM80912-015** is designed for avionics applications, including JTIDS. It is housed in a Hermetic Package.

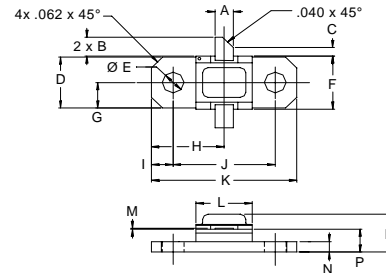
FEATURES:

- Internal Input/Output Matching Network
- $P_G = 8.1$ dB at 15 W/ 1215 MHz
- **Omnigold™** Metalization System
- 28 V Operations
- Common Base configuration

MAXIMUM RATINGS

I_C	1.8 A
V_{CC}	32 V
P_{DISS}	50 W @ $T_C = 25$ °C
T_J	-65 °C to +250 °C
T_{STG}	-65 °C to +200 °C
θ_{JC}	3.0 °C/W

PACKAGE STYLE .310 2L FLG



DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.095 / 2.41	.105 / 2.67
B	.100 / 2.54	.120 / 3.05
C	.050 / 1.27	
D	.286 / 7.26	.306 / 7.77
E	.110 / 2.79	.130 / 3.30
F	.306 / 7.77	.318 / 8.08
G		.148 / 3.76
H		.400 / 10.16
I		.119 / 3.02
J	.552 / 14.02	.572 / 14.53
K	.790 / 20.07	.810 / 20.57
L	.300 / 7.62	.320 / 8.13
M	.003 / 0.08	.006 / 0.15
N	.052 / 1.32	.072 / 1.83
P	.118 / 3.00	.131 / 3.33
R		.230 / 5.84

CHARACTERISTICS $T_C = 25$ °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CBO}	$I_C = 10$ mA	55			V
BV_{CER}	$I_C = 10$ mA $R_{BE} = 10$ Ω	55			V
BV_{EBO}	$I_E = 1$ mA	3.5			V
I_{CES}	$V_{CE} = 28$ V $V_{BE} = 0$ V			2.0	mA
h_{FE}	$V_{CE} = 5.0$ V $I_C = 500$ mA	15		150	---
P_G	$V_{CC} = 28$ V $P_{OUT} = 15$ W $f = 960 - 1215$ MHz	8.1	8.9		dB
η_c	$P_{IN} = 2.3$ W	45	49		%

Pulse format: 6.4 μ sec on 6.6 μ sec off, repeat for 3.3 ms, Then off for 4.5125 ms

Duty Cycle: Burst 49.2%, overall 20.8%