

RF POWER TRANSISTOR

DESCRIPTION:

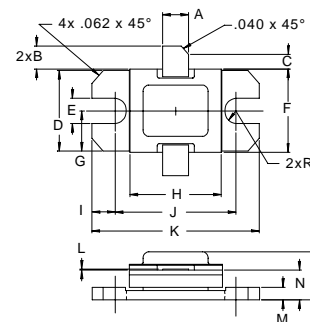
The **ASI AM0912-300** is a Common Base Transistor Designed for DME and TACAN Pulse Power Amplifier Applications.

FEATURES INCLUDE:

- Gold Metallization
- Hermetic Package
- Input/Output Matching

MAXIMUM RATINGS

I_C	24 A
V_{CC}	50 V
P_{DISS}	940 W @ T _C = ≤ 100 °C
T_J	-65 °C to +250 °C
T_{STG}	-65 °C to +200 °C
θ_{JC}	0.16 °C/W

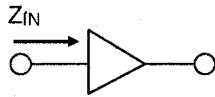
PACKAGE - .400 2L FLG(A)


DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.135 / 3.43	.145 / 3.68
B	.100 / 2.54	.120 / 3.05
C	.050 / 1.27	
D	.376 / 9.55	.396 / 10.06
E	.110 / 2.79	.130 / 3.30
F	.395 / 10.03	.407 / 10.34
G	.193 / 4.90	
H	.490 / 12.45	.510 / 12.95
I	.100 / 2.54	
J	.690 / 17.53	.710 / 18.03
K	.890 / 22.61	.910 / 23.11
L	.003 / 0.08	.006 / 0.18
M	.052 / 1.32	.072 / 1.83
N	.118 / 3.00	.131 / 3.33
P		.230 / 5.84

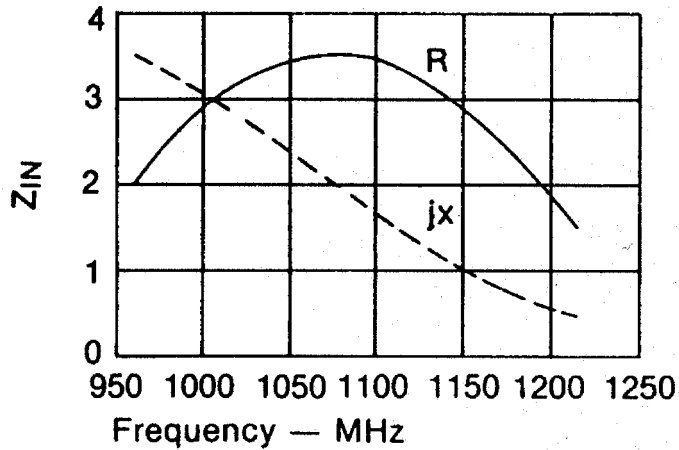
CHARACTERISTICS T_C = 25 °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CBO}	I _C = 50 mA	65			V
BV_{CER}	I _C = 50 mA R _{BE} = 10 Ω	65			V
BV_{EBO}	I _E = 15 mA	3.0			V
I_{CES}	V _{CB} = 50 V			30	mA
h_{FE}	V _{CE} = 5.0 V I _C = 5.0 A	10			---
P_{OUT}	V _{CC} = 50 V f = 960 to 1215 MHz P _{IN} = 60 W Pulse Width = 10 μS Duty Cycle = 10%	300	330		W
P_G		7.0	7.4		dB
η_C		38	45		%

TYPICAL INPUT IMPEDANCE

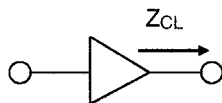


$P_{IN} = 60\text{ W}$
 $V_{CC} = 50\text{ V}$
 $Z_O = 50\text{ ohms}$



FREQ.	$Z_{IN} (\Omega)$	$Z_{CL} (\Omega)$
L = 960 MHz	$2.0 + j 3.6$	$1.7 - j 2.2$
M = 1090 MHz	$3.5 + j 1.7$	$2.0 - j 1.7$
H = 1215 MHz	$1.6 + j 0.5$	$1.8 - j 2.0$

TYPICAL COLLECTOR LOAD IMPEDANCE



$P_{IN} = 60\text{ W}$
 $V_{CC} = 50\text{ V}$
 $Z_O = 50\text{ ohms}$

