

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI 1517-025M** is Designed for Satellite communications applications in the 1620 to 1660 MHz range.

FEATURES:

- Internal Input/Output Matching Networks
- $P_G = 8.5$ dB at 25 W/1.5 – 1.7 GHz
- **Omnigold™** Metalization System

MAXIMUM RATINGS

I_C	2.5 A
V_{CC}	30 V
P_{DISS}	45 W @ $T_C \leq 100$ °C
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +200 °C
θ_{JC}	3.3 °C/W

PACKAGE STYLE .400 2NL FLG

DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.020 / 0.51	.030 / 0.76
B	.100 / 2.54	
C	.376 / 9.55	.396 / 10.06
D	.110 / 2.79	.130 / 3.30
E	.395 / 10.03	.407 / 10.34
F		.193 / 4.90
G		.450 / 11.43
H		.125 / 3.18
I	.640 / 16.26	.660 / 16.76
J	.890 / 22.61	.910 / 23.11
K	.395 / 10.03	.415 / 10.54
L	.004 / 0.10	.007 / 0.18
M	.052 / 1.32	.072 / 1.83
N	.118 / 3.00	.131 / 3.33
P		.230 / 5.84

COMMON BASE

CHARACTERISTICS $T_C = 25$ °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CBO}	$I_C = 8.0$ mA	45			V
BV_{EBO}	$I_E = 8.0$ mA	3.0			V
I_{CBO}	$V_{CE} = 28$ V			2.0	mA
h_{FE}	$V_{CE} = 5.0$ V $I_C = 1.6$ A	15		150	---
C_{ob}	$V_{CB} = 28$ V $f = 1.0$ MHz			80	pF
P_G	$V_{CC} = 28$ V $P_{OUT} = 25$ W $f = 1620 - 1660$ MHz	8.5			dB
η_c	$P_{IN} = 3.5$ W	55	58		%