

# 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
$\theta_{JC}$	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
$\eta_c$	$P_{IN} = 3.5$ W	55	58		%