

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

The **ASI MLN1037S** is Designed for Class A Linear Applications up to 1.0 GHz.

**FEATURES:**

- Class A Operation
- $P_G = 8.0$  dB at 5.0 W/1.0 GHz
- **Omnigold™** Metalization System

**MAXIMUM RATINGS**

$I_C$	10 A
$V_{CB}$	60 V
$V_{CE}$	35 V
$P_{DISS}$	140 W @ $T_C = 25$ °C
$T_J$	-65 °C to +200 °C
$T_{STG}$	-65 °C to +150 °C
$\theta_{JC}$	5.5 °C/W

**PACKAGE STYLE .280 4L STUD**

DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	1.010 / 25.65	1.055 / 26.80
B	.220 / 5.59	.230 / 5.84
C	.270 / 6.86	.285 / 7.24
D	.003 / 0.08	.007 / 0.18
E	.117 / 2.97	.137 / 3.48
F	.572 / 14.53	
G	.130 / 3.30	
H	.245 / 6.22	.255 / 6.48
I	.640 / 16.26	
J	.175 / 4.45	.217 / 5.51
K	.275 / 6.99	.285 / 7.24

**ORDER CODE: ASI10629**

**CHARACTERISTICS**  $T_C = 25$  °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$BV_{CEO}$	$I_C = 50$ mA	35			V
$BV_{CER}$	$I_C = 50$ mA $R_{BE} = 10$ Ω	60			V
$BV_{EBO}$	$I_E = 10$ mA	4.0			V
$I_{CES}$	$V_E = 28$ V			5	mA
$h_{FE}$	$V_{CE} = 5.0$ V $I_C = 1.0$ A	10		100	---
$C_{ob}$	$V_{CB} = 28$ V $f = 1.0$ MHz			15	pF
$P_{GE}$	$V_{CE} = 20$ V $I_{CQ} = 800$ mA $f = 1.0$ GHz $P_{OUT} = 5.0$ W	8.0			dB