



NPN SILICON RF LOW POWER TRANSISTOR

DESCRIPTION:

The **ASI MRF837** is Designed primarily for wideband large signal predriver stages in 800 MHz and UHF frequency ranges.

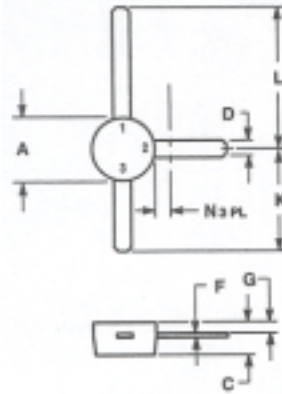
FEATURES INCLUDE:

- Min gain 8.0 dB @ 750 mW/870 MHz
- Silicon Nitride passivated
- Low cost Plastic Package

MAXIMUM RATINGS

I_C	200 mA
V_{CBO}	36 V
P_{DISS}	1.0 W @ $T_C = 25\text{ }^\circ\text{C}$
T_J	-65 $^\circ\text{C}$ to +150 $^\circ\text{C}$
T_{STG}	-65 $^\circ\text{C}$ to +150 $^\circ\text{C}$
θ_{JC}	40 $^\circ\text{C}/\text{W}$

PACKAGE STYLE MACRO-X



DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	4.44	5.21	0.175	0.205
C	1.90	2.54	0.075	0.100
D	0.84	0.99	0.033	0.039
F	0.20	0.30	0.008	0.012
G	0.76	0.14	0.030	0.045
K	7.24	8.13	0.285	0.320
L	10.54	11.43	0.415	0.450
N	---	1.65	---	0.065

1 = COLLECTOR 2 = EMITTER
3 = BASE

CHARACTERISTICS $T_C = 25\text{ }^\circ\text{C}$

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CES}	$I_C = 5.0\text{ mA}$	36			V
BV_{CEO}	$I_C = 5.0\text{ mA}$	16			V
BV_{EBO}	$I_E = 100\text{ }\mu\text{A}$	4.0			V
I_{CES}	$V_{CE} = 15\text{ V}$			100	μA
h_{FE}	$V_{CE} = 10\text{ V}$ $I_C = 50\text{ mA}$	30		200	---
C_{OB}	$V_{CB} = 15\text{ V}$ $f = 1.0\text{ MHz}$		1.8	2.5	pF
P_G η_c	$V_{CE} = 12.5\text{ V}$ $P_{OUT} = 0.75\text{ W}$ $f = 870\text{ MHz}$	8.0 55	10 60		dB %