

SILICON POWER NPN TRANSISTOR

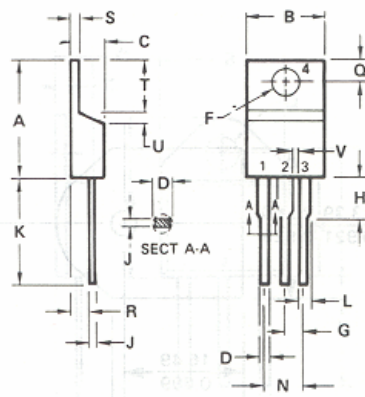
DESCRIPTION:

The **ASI MRF342** is designed for VHF amplifier applications operating to 150 MHz.

MAXIMUM RATINGS

I_C	3.0 A
V_{CEO}	35 V
V_{CBO}	65 V
V_{EBO}	4.0 V
P_{DISS}	55 W @ $T_C = 25\text{ }^{\circ}\text{C}$
T_J	-55 $^{\circ}\text{C}$ to +150 $^{\circ}\text{C}$
T_{STG}	-55 $^{\circ}\text{C}$ to +150 $^{\circ}\text{C}$
θ_{JC}	3.2 $^{\circ}\text{C/W}$

PACKAGE STYLE TO-220AB



1 = Base 2 = Emitter 3 = Collector
4 = Emitter

DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	15.11	15.75	0.595	0.620
B	9.65	10.29	0.380	0.405
C	4.06	4.82	0.160	0.190
D	0.64	0.89	0.025	0.035
F	3.61	3.73	0.142	0.147
G	2.41	2.67	0.095	0.105
H	2.79	3.30	0.110	0.130
J	0.36	0.56	0.014	0.022
K	12.70	14.27	0.500	0.562
L	1.14	1.27	0.045	0.050
N	4.83	5.33	0.190	0.210
Q	2.54	3.04	0.100	0.120
R	2.04	2.79	0.080	0.110
S	1.14	1.39	0.045	0.055
T	5.97	6.48	0.235	0.255
U	0.76	1.27	0.030	0.050
V	1.14	-	0.045	-

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

SYMBOL	TEST CONDITIONS		MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CEO}	$I_C = 20\text{ mA}$		35			V
BV_{CES}	$I_C = 20\text{ mA}$		65			V
BV_{CBO}	$I_C = 20\text{ mA}$		65			V
BV_{EBO}	$I_E = 2.0\text{ mA}$		4.0			V
I_{CES}	$V_{CE} = 27\text{ V}$				2.0	mA
h_{FE}	$V_{CE} = 5.0\text{ V}$	$I_C = 1.0\text{ A}$	10		100	---
C_{OB}	$V_{CB} = 27\text{ V}$	$f = 1.0\text{ MHz}$		20	30	pF
G_{PE}	$V_{CC} = 13.5\text{ V}$	$P_{OUT} = 6.0\text{ W}$ $f = 136\text{ MHz}$	10	11.5		dB
G_{PE}	$V_{CC} = 27\text{ V}$	$P_{OUT} = 24\text{ W}$ $f = 136\text{ MHz}$	11	12.3		dB
η_C			50	60		%