

MRF342

SILICON POWER NPN TRANSISTOR

DESCRIPTION:

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 @ $T_C = 25^\circ C$
T_J	$-55^\circ C$ to $+150^\circ C$
T_{STG}	$-55^\circ C$ to $+150^\circ C$
θ_{JC}	3.2 $^\circ C/W$

PACKAGE STYLE TO-220AB

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	

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

CHARACTERISTICS $T_C = 25^\circ C$

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

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