

NPN Silicon RF power transistor

MRF316

Description:

MRF316 is designed primarily for wideband large-signal output amplifier stages in the 30–200 MHz frequency range.

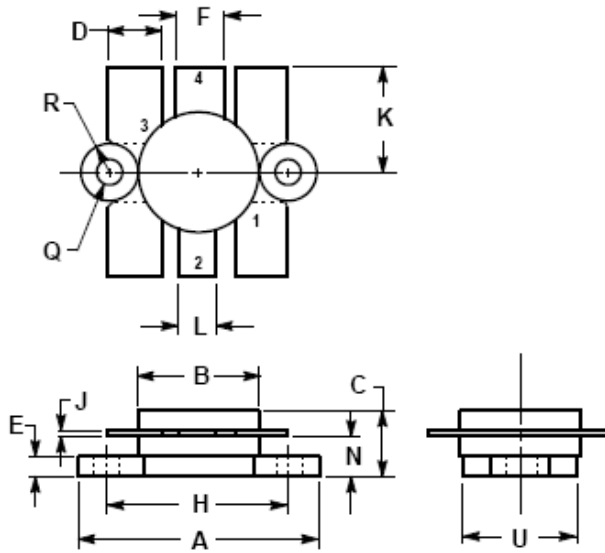
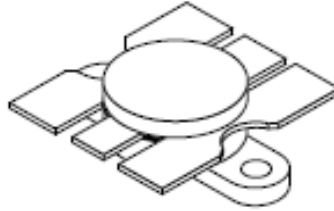
Maximum Ratings at TU = 25

Symbol	Test Conditions	Characteristics		Units
BVCES	IC=20 mA	Max.	65	V
BVCEO	IC=40 mA	Max.	35	V
BVEBO	IE=10 mA	Max.	4	V
IC		Max.	9	A
Ptot		Max.	220	W
TSTG		Min.	-65	
		Max.	150	
TjM		Max.	200	

Characteristics at TU = 25 (VCC =28 V f=150 MHz)

Symbol	Test Conditions	Characteristics		Units
Pout		Typ.	80	W
GP		Typ.	10	dB
		Typ.	55	%
hFE	IC = 5.2A VCE =10V	Typ.	45	
VCEsat	IC =6A IB =1.2A	Max.	1.5	V
ICES	VCE =35V	Max.	10	mA
CCBO	VCB =28V	Typ.	200	pF
d3		Max.		dB

Drawings:



NOTES:
1. FLANGE IS ISOLATED IN ALL STYLES.

DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	24.38	25.14	0.960	0.990
B	12.45	12.95	0.490	0.510
C	5.97	7.62	0.235	0.300
D	5.33	5.58	0.210	0.220
E	2.16	3.04	0.085	0.120
F	5.08	5.33	0.200	0.210
H	18.29	18.54	0.720	0.730
J	0.10	0.15	0.004	0.006
K	10.29	11.17	0.405	0.440
L	3.81	4.06	0.150	0.160
N	3.81	4.31	0.150	0.170
Q	2.92	3.30	0.115	0.130
R	3.05	3.30	0.120	0.130
U	11.94	12.57	0.470	0.495

STYLE 1:
PIN 1. EMITTER
2. COLLECTOR
3. EMITTER
4. BASE

SOT119