NPN Silicon RF power transistor MRF412

Description:
MRF412 is designed primarily for applications as a high power amplifier from 2.0 to 30 MHz, in single sideband mobile, marine and base station equipment where superior ruggedness is required.

Features:
Specified 13.6V, 30MHz characteristics:
Pout: 70W PEP or CW, Min Gpe: 13dB, Efficiency:40%, Intermodulation Distortion d3= -33dB Typ

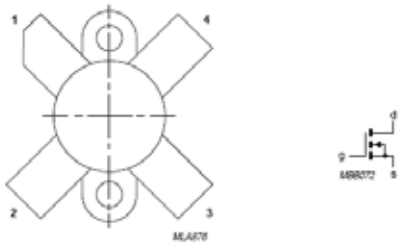
Maximum Ratings at TU = 25℃

Symbol	Test Conditions	Characteristics		Units
BVCES	IC=20 mA	Max.	35	V
BVCEO	IC=50 mA	Max.	18	V
BVEBO	IE=10 mA	Max.	4	V
IC		Max.	18	A
Ptot		Max.	240	W
TSTG		Min.	-65	℃
		Max.	150	℃
TjM		Max.	200	℃

Characteristics at TU = 25℃ (VCC =12.5 V f=30 MHz)

Symbol	Test Conditions	Characteristics		Units
Pout		Typ.	70*	W
GP		Typ.	>12	dB
η		Typ.	>40	%
hFE	IC = 5A VCE =5V	Typ.	50	
VCEsat	IC = 5A IB =1 A	Max.	1.5	V
ICES	VCE =15V	Max.	20	mA
CCBO	VCB =15V	Typ.	450	pF
d3		Max.	＜-30	dB

Drawings:



SOT121 or CASE211-11