

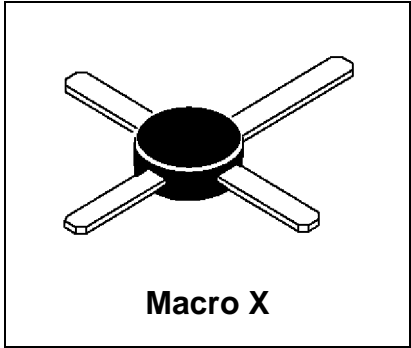
MRF837 MRF837G

* G Denotes RoHS Compliant, Pb Free Terminal Finish

RF & MICROWAVE DISCRETE LOW POWER TRANSISTORS

Features

- Specified @ 12.5V, 870 MHz characteristics
- Output Power = 750 mW
- Minimum Gain = 8.0dB
- Efficiency 60% Typical
- Cost Effective Macro-X package



DESCRIPTION: Designed primarily for wideband large signal stages in the 800 MHz and UHF frequency ranges.

ABSOLUTE MAXIMUM RATINGS (T_{case} = 25°C)

Symbol	Parameter	Value	Unit
V _{CEO}	Collector-Emitter Voltage	16	V
V _{CBO}	Collector-Base Voltage	30	V
V _{EBO}	Emitter-Base Voltage	3	V
I _C	Collector Current	200	mA
P _D	Total Device Dissipation @ TC = 50°C	2.5	W
T _{STG}	Storage Junction Temperature Range	-65 to +150	°C

Thermal Data

R _{TH(J-C)}	Thermal Resistance Junction-Case	40	°C/W
----------------------	----------------------------------	----	------

MRF837
MRF837G

ELECTRICAL SPECIFICATIONS (T_{case} = 25°C)
STATIC

Symbol	Test Conditions	Value			Unit
		Min.	Typ.	Max.	
BV _{CEO}	I _C = 5.0 mA, I _B = 0	16	-	-	V
BV _{CES}	I _C = 5.0 mA, V _{BE} = 0	30	-	-	V
BV _{EBO}	I _E = 0.1 mA, I _C = 0	3.0	-	-	V
I _{CES}	V _{CE} = 15 V, V _{BE} = 0 V	-	-	0.1	mA
HFE	V _{CE} = 5.0 v, I _C = 50 mA	30	-	200	-

FUNCTIONAL

Symbol	Test Conditions	Value			Unit
		Min.	Typ.	Max.	
G _{PE}	f = 870 MHz, P _{OUT} = 0.75W, V _{CE} = 12.5V	8.0	9.5	-	dB
η _c	f = 870MHz, P _{OUT} = 0.75W, V _{CE} = 12.5V	50	60	-	%
C _{OB}	V _{CB} = 15 V, f = 1.0 MHz	-	-	2.75	pf

**MRF837
MRF837G**

PACKAGE MECHANICAL DATA

