THE DATASHEET OF

MRF8372R1

ADVANCED POWER TECHNOLOGY RF®

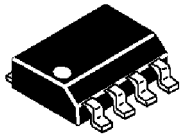
MRF8372, R1, R2
MRF8372G, R1, R2

RF & MICROWAVE DISCRETE LOW POWER TRANSISTORS

* G Denotes RoHS Compliant, Pb Free Terminal Finish

Features

- **Specified @ 12.5V, 870 MHz characteristics**
- **Output Power = 750 mW**
- **Minimum Gain = 8.0dB**
- **Efficiency 60% Typical**
- **Cost Effective SO-8 package**



SO-8

R1 suffix–Tape and Reel, 500 units
R2 suffix–Tape and Reel, 2500 units

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

ABSOLUTE MAXIMUM RATINGS (Tcase = 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 = 50ºC	2.2	W
T_{STG}	Storage Junction Temperature Range	-65 to +150	ºC

Thermal Data

$R_{TH(J-C)}$	Thermal Resistance Junction-Case	45	°C/W

ELECTRICAL SPECIFICATIONS (Tcase = 25°C)

STATIC

Symbol	Test Conditions	Value			
		Min.	Typ.	Max.	Unit
BV_{CEO}	I_C = 5.0 mA, I_B = 0	16	-	-	V
BV_{CES}	Ic = 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, Ic = 50 mA	30	-	200	-

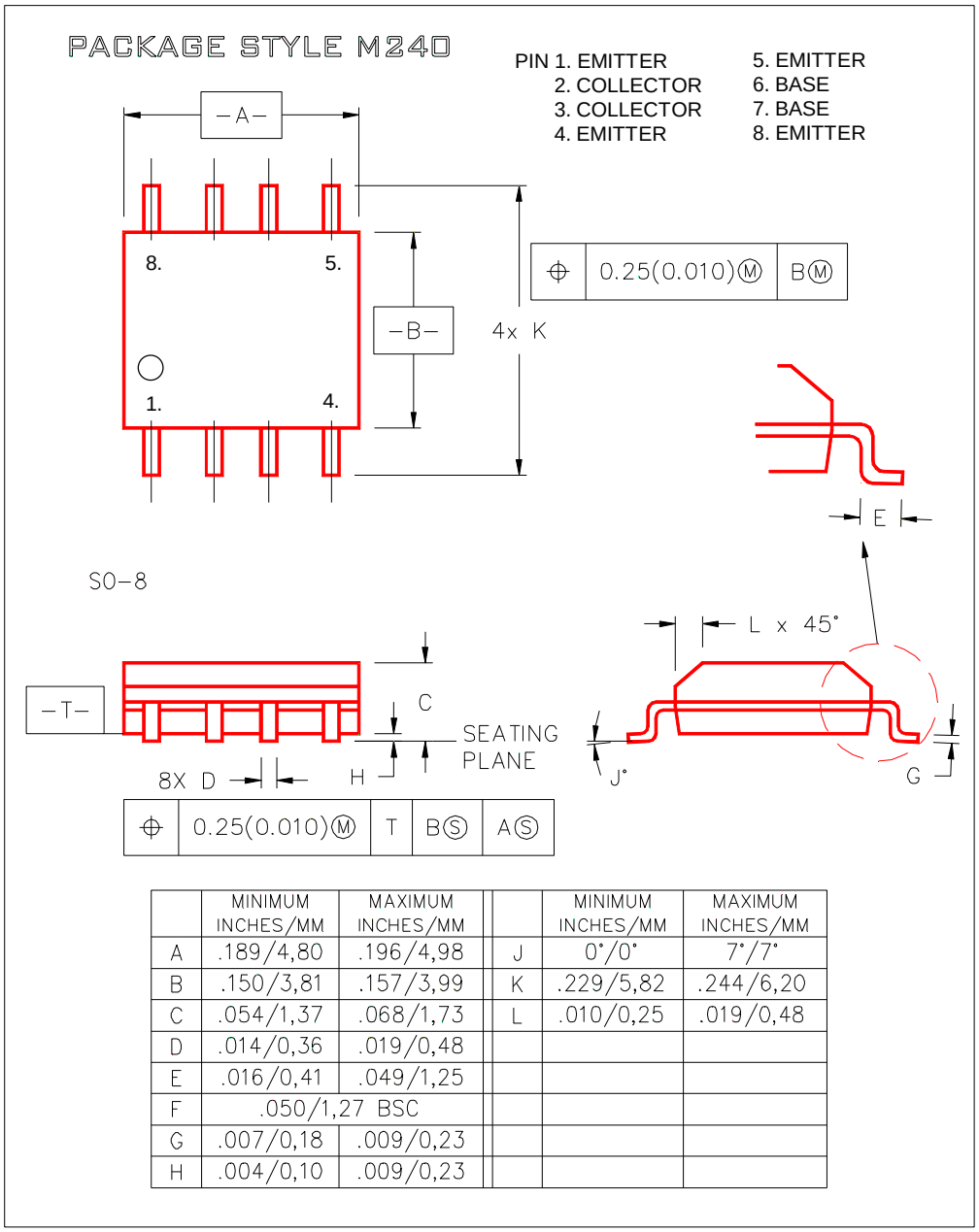
FUNCTIONAL

Symbol	Test Conditions	Value			
		Min.	Typ.	Max.	Unit
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

MRF8372, R1, R2

MRF8372G, R1, R2

PACKAGE MECHANICAL DATA



	MINIMUM INCHES/MM	MAXIMUM INCHES/MM		MINIMUM INCHES/MM	MAXIMUM INCHES/MM
A	.189/4,80	.196/4,98	J	0°/0°	7°/7°
B	.150/3,81	.157/3,99	K	.229/5,82	.244/6,20
C	.054/1,37	.068/1,73	L	.010/0,25	.019/0,48
D	.014/0,36	.019/0,48			
E	.016/0,41	.049/1,25			
F	.050/1,27 BSC				
G	.007/0,18	.009/0,23			
H	.004/0,10	.009/0,23			

Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

- View MRF8372R1 on WIN SOURCE
- Microsemi Corporation Information

Optimize Your Supply Chain with WIN SOURCE Solutions

- Global Sourcing Solution
- Obsolete Management
- Cost Control Management
- Shortage Management
- Alternative Solution
- Excess Inventory Management