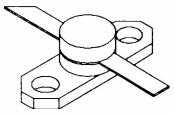
Microsemi
POWER PRODUCTS GROUP

MS2205

RF & MICROWAVE TRANSISTORS
AVIONICS APPLICATIONS

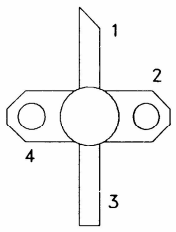


.280 2LFL (M220)
Epoxy Sealed

Features

- **1025-1150 MHz**
- **GOLD METALLIZATION**
- **INFINITE VSWR CAPABILITY @ RATED CONDITIONS**
- **Pout = 4 W MINIMUM**
- **G_P= 10 dB**
- **COMMON BASE CONFIGURATION**

PIN CONNECTION



1. Collector
2. Base
3. Emitter
4. Base

DESCRIPTION:

The MS2205 is a common base, silicon NPN microwave transistor designed for Class C driver applications under DME or IFF pulse conditions. This device is capable of withstanding an infinite load VSWR at any phase angle under rated conditions.

ABSOLUTE MAXIMUM RATINGS **(Tcase = 25°C)**

Symbol	Parameter	Value	Unit
P_{DISS}	Power Dissipation	7.5	W
V_{CE}	Collector-Emitter Bias Voltage	37	V
T_J	Junction Temperature	200	°C
I_C	Device Current	1.0	A
T_{STG}	Storage Temperature	-65 to +200	°C

Thermal Data

$R_{TH(J-C)}$	Junction-case Thermal Resistance*	35	°C/W

Revision 1

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ELECTRICAL SPECIFICATIONS (Tcase = 25°C)

STATIC

Symbol	Test Conditions		Value			
			Min.	Typ.	Max.	Unit
BV_{CBO}	I_C = 1 mA	I_E = 0 mA	45	---	---	V
BV_{CEO}	I_C = 5 mA	I_B = 0mA	20	---	---	V
BV_{EBO}	I_E = 1.0 mA	I_C = 0 mA	3.5	---	---	V
I_{CES}	V_{CE} = 35 V		---	---	1.0	mA
HFE	V_{CE} = 5 V	I_C = 100 mA	20	---	120	---

DYNAMIC

Symbol	Test Conditions			Value			
				Min.	Typ.	Max.	Unit
P_{OUT}	f =1025 - 1150 MHz	P_{IN} = 400mW	V_{CE} =35V	4	---	---	W
G_P	f =1025 - 1150 MHz	P_{IN} = 400mW	V_{CE} =35V	10	---	---	dB
Conditions	Pulse Width = 10 μs	Duty Cycle = 1%					

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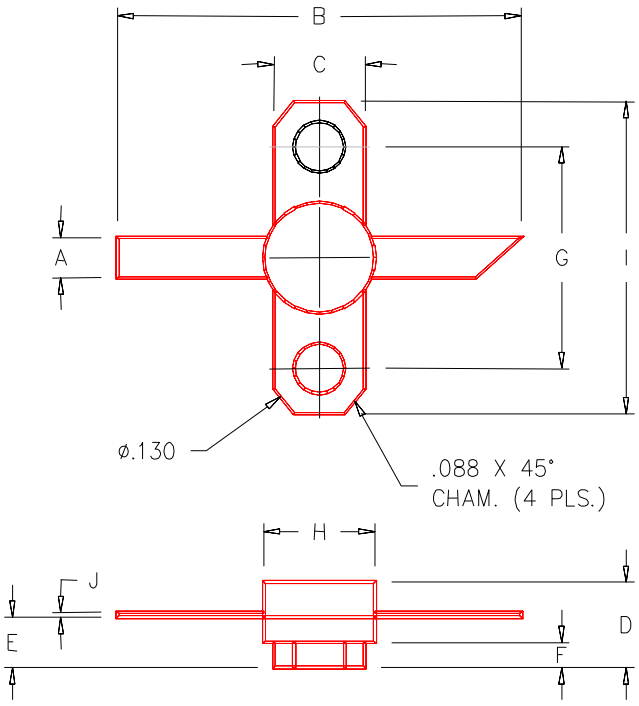
PACKAGE MECHANICAL DATA

PACKAGE STYLE M220



	MINIMUM INCHES/MM	MAXIMUM INCHES/MM		MINIMUM INCHES/MM	MAXIMUM INCHES/MM
A	.100/2,54		J	.003/0,08	.006/0,15
B	1.050/26,67				
C	.250/6,35				
D		.210/5,33			
E	.120/3,05	.130/3,30			
F	.062/1,58				
G	.562/14,28				
H		.285/7,24			
I	.800/20,32				