



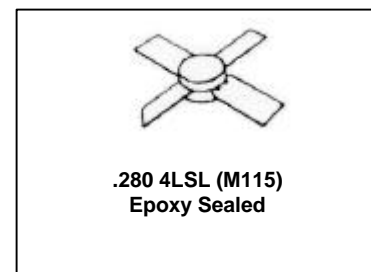
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MS2206

RF & MICROWAVE TRANSISTORS AVIONICS APPLICATIONS

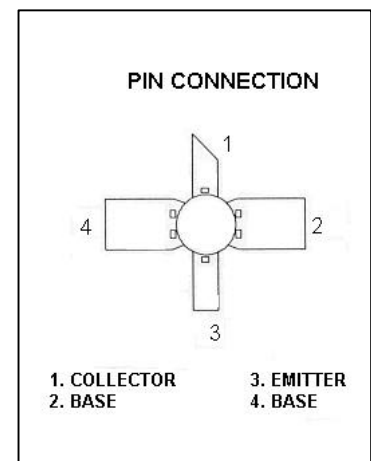
Features

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



DESCRIPTION:

The MS2206 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
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ELECTRICAL SPECIFICATIONS (T_{case} = 25°C)

STATIC

Symbol	Test Conditions		Value			Unit
			Min.	Typ.	Max.	
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	---

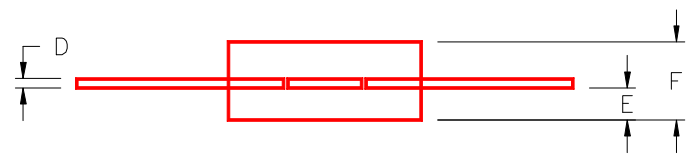
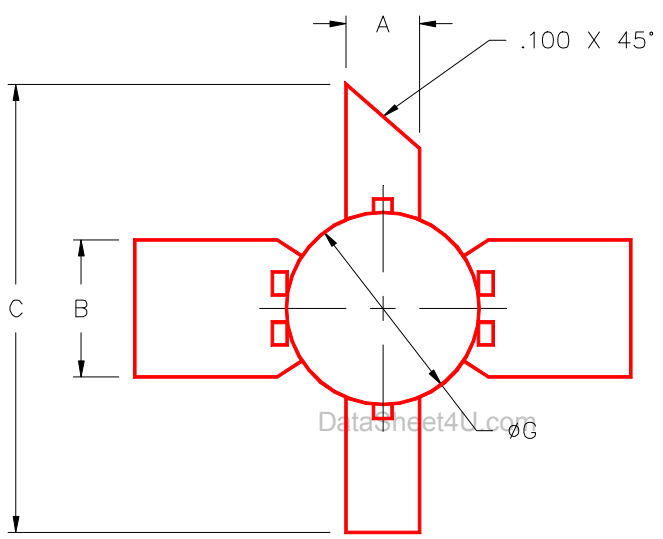
DYNAMIC

Symbol	Test Conditions			Value			Unit
				Min.	Typ.	Max.	
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%

PACKAGE MECHANICAL DATA

PACKAGE STYLE M115



	MINIMUM INCHES/MM	MAXIMUM INCHES/MM		MINIMUM INCHES/MM	MAXIMUM INCHES/MM
A	.095/2,41	.105/2,67			
B	.195/4,95	.205/5,21			
C	1.000/25,40				
D	.004/0,10	.007/0,18			
E	.050/1,27	.065/1,65			
F	.120/3,05	.135/3,43			
G	.275/6,99	.285/7,21			