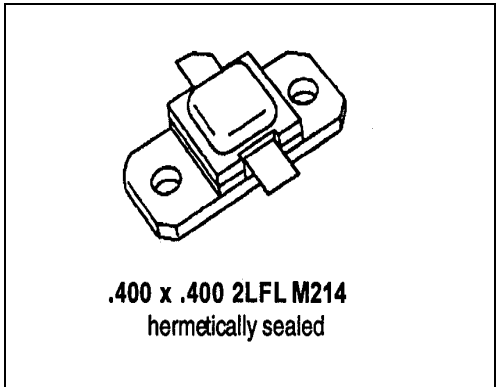


MS3303

**RF & MICROWAVE TRANSISTORS
 COMMUNICATIONS APPLICATIONS**

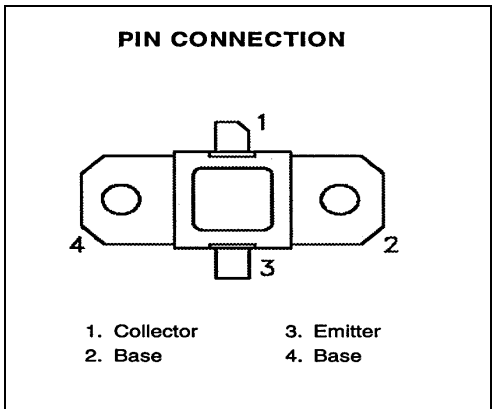
Features

- 1.7 – 2.0 GHz
- 24 VOLTS
- INPUT/OUTPUT MATCHING
- P_{OUT} = 12 WATTS
- G_P = 7.5 dB MINIMUM
- COMMON BASE CONFIGURATION



DESCRIPTION:

The MS3303 is a designed specifically for telecommunications applications. Emitter site ballasting provides infinite VSWR capability and internal impedance matching provides superior broadband performance.



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

Symbol	Parameter	Value	Unit
P _{DISS}	Power Dissipation	31.8	W
V _{CC}	Collector-Supply Voltage	24	V
I _C	Device Current	1.47	A
T _J	Junction Temperature	200	°C
T _{STG}	Storage Temperature	-65 to +200	°C

Thermal Data

R _{TH(J-C)}	Thermal Resistance Junction-case	5.5	°C/W
----------------------	----------------------------------	-----	------

ELECTRICAL SPECIFICATIONS (Tcase = 25°C)

STATIC

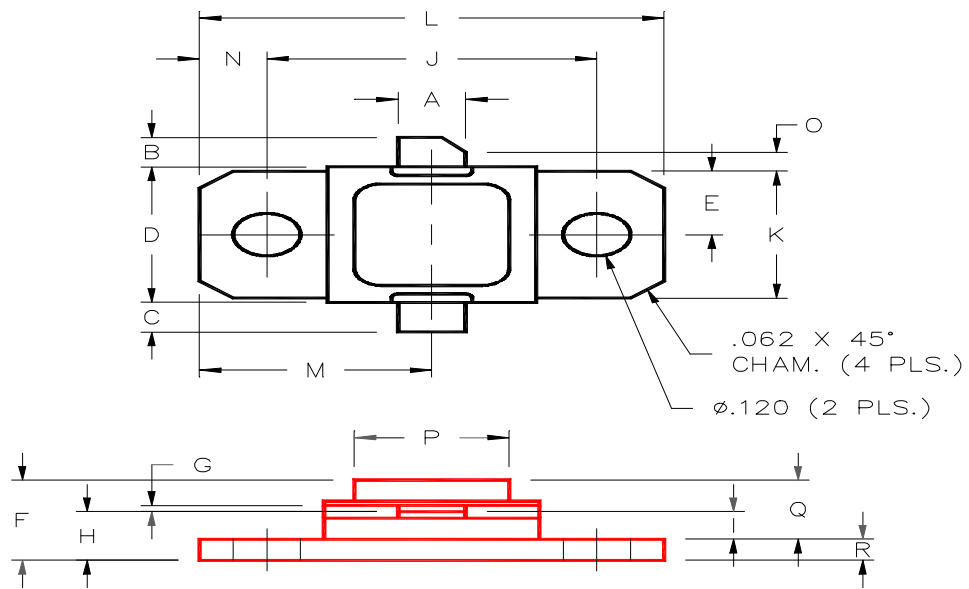
Symbol	Test Conditions			Value			Unit
				Min.	Typ.	Max.	
BV_{CBO}	I_C = 5mA	I_E = 0mA		45	---	---	V
BV_{EBO}	I_E = 5mA	I_C = 0mA		3.0	---	---	V
I_{CBO}	V_{CB} = 24V			---	---	1.25	mA
H_{FE}	V_{CE} = 5V	I_C = 1A		15	---	150	---

DYNAMIC

Symbol	Test Conditions			Value			Unit
				Min.	Typ.	Max.	
P_{OUT}	f = 1.7 – 2.0GHz	P_{IN} = 2.2W	V_{CC} = 24V	12	---	---	W
G_P	f = 1.7 – 2.0GHz	P_{IN} = 2.2W	V_{CC} = 24V	7.4	---	---	dB
η_C	f = 1.7 – 2.0GHz	P_{IN} = 2.2W	V_{CC} = 24V	40	---	---	%

PACKAGE MECHANICAL DATA

PACKAGE STYLE M214



	MINIMUM INCHES/MM	MAXIMUM INCHES/MM		MINIMUM INCHES/MM	MAXIMUM INCHES/MM
A	.140/3,56		J	.650/16,51	
B	.110/2,80		K	.386/9,80	
C	.110/2,80		L	.900/22,86	
D	.395/10,03	.407/10,34	M	.450/11,43	
E	.193/4,90		N	.125/3,18	
F		.230/5,84	O	.050/1,27	
G	.003/0,08	.006/0,15	P	.405/10,29	
H	.118/3,00	.131/3,33	Q	.170/4,32	
I	.063/1,60		R	.062/1,58	