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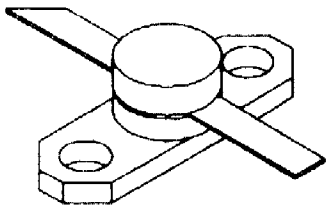
MS2203

RF & MICROWAVE TRANSISTORS AVIONICS APPLICATIONS

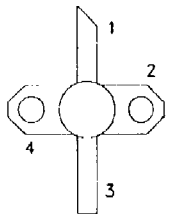


.280 2LFL M220
epoxy sealed

Features

- 1090 MHz
- 18 VOLTS
- P_{OUT} = 0.6 WATTS
- G_P = 10.8 dB MINIMUM
- CLASS A OPERATION
- INFINITE VSWR CAPABILITY @ RATED CONDITIONS
- COMMON EMITTER CONFIGURATION

PIN CONNECTION



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

DESCRIPTION:

The MS2203 is a common emitter, silicon NPN, microwave transistor designed for Class A 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
V_{CE}	Collector-Emitter	20	V
I_C	Collector Current	300	mA
P_D	Total Device Dissipation	5	W
T_J	Junction Temperature	200	°C
T_{stg}	Storage Temperature Range	-65 + 150	°C

Thermal Data

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

ELECTRICAL SPECIFICATIONS (Tcase = 25°C)

STATIC

Symbol	Test Conditions		Value			Unit
			Min.	Typ.	Max.	
BV_{CEO}	I_C = 5.0 mA	I_B = 0 mA	20	---	---	V
BV_{CBO}	I_C = 1.0 mA	I_E = 0 mA	50	---	---	V
BV_{EBO}	I_E = 1.0 mA	I_C = 0 mA	3.5	---	---	V
I_{CES}	V_{CE} = 28 V		---	---	1.0	mA
h_{FE}	V_{CE} = 5.0 V	I_C = 100 mA	15	---	120	---

DYNAMIC

Symbol	Test Conditions		Value			Unit
			Min.	Typ.	Max.	
P_{OUT}	f = 1025 – 1150 MHz	P_{IN} = 50mW	0.6	0.85	---	W
G_{PE}	f = 1025 – 1150 MHz	P_{IN} = 50 mW	10.8	12.3	---	dB

Conditions: V_{CE} = 18V

Icq = 120 mA