

MS1204

RF AND MICROWAVE TRANSISTORS HF SSB APPLICATIONS

Features

- CLASS C TRANSISTOR
- FREQUENCY 136MHz
- VOLTAGE 28V
- POWER OUT 80W
- POWER GAIN 9.0dB
- COMMON EMITTER

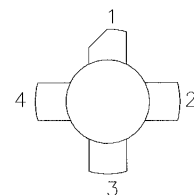
DESCRIPTION:

The SD1019 is a 28 volt epitaxial silicon NPN planar transistor designed primarily for VHF communications. This device utilizes nichrome aluminum metallization to achieve infinite VSWR at rated operating conditions.



.500 4L STUD (M130)
epoxy sealed

PIN CONNECTION



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

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

Symbol	Parameter	Value	Unit
V _{CBO}	Collector-Base Voltage	65	V
V _{CEO}	Collector-Emitter Voltage	35	V
V _{EBO}	Emitter-Base Voltage	4	V
I _C	Device Current	9	A
P _{DISS}	Power Dissipation	117	W
T _J	Junction Temperature	+ 200	°C
T _{STG}	Storage Temperature	- 65 to + 150	°C

Thermal Data

R _{TH(j-c)}	Junction-Case Thermal Resistance	1.7	°C/W
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MS1204

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

STATIC

Symbol	Test Conditions	Value			Units
		Min.	Typ.	Max.	
BV_{CBO}	I_C = 20 mA I_E = 0 V	65			V
BV_{CEO}	I_C = 200 mA I_B = 0 mA	35			V
BV_{EBO}	I_E = 10 mA I_C = 0 mA	4			V
I_{CBO}	V_{CB} = 30 V I_E = 0 V		1.5		mA
h_{FE}	V_{CE} = 5 V I_C = 500 Ma	5			

DYNAMIC

Symbol	Test Conditions	Value			Units
		Min.	Typ.	Max.	
P_{OUT}	f = 136 MHz V_{CE} = 28 V	80			W
G_P	f = 136 MHz V_{CE} = 28 V	9			dB
C_{OB}	f = 1 MHz V_{CB} = 30 V I_E = 0 V			150	PF

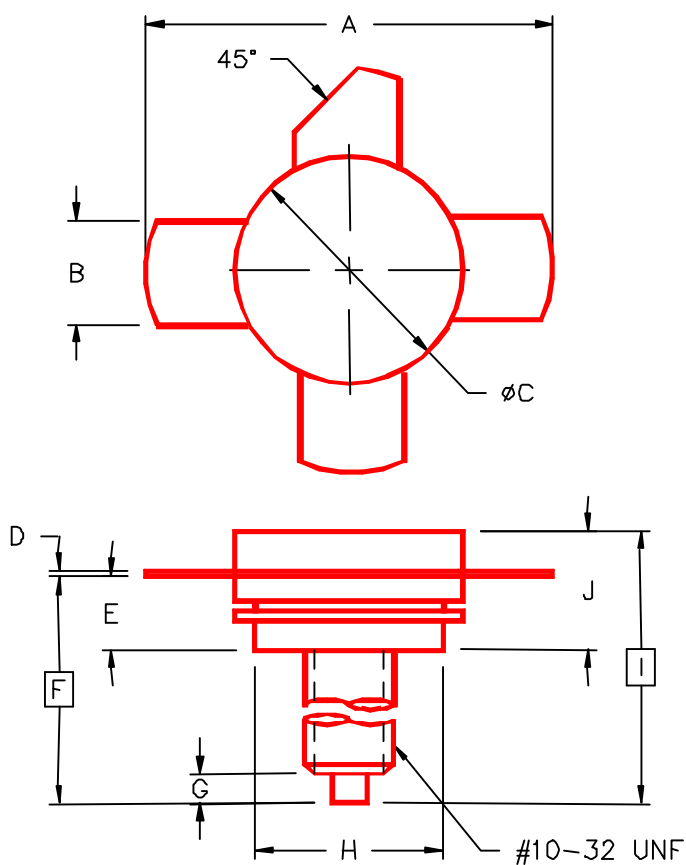
IMPEDANCE DATA

Freq.	Z _S (Ω)	Z _{CL} (Ω)
136 MHz	.85 – j 0.5 W	4.5 + j 1.9 W

V_{CE} = 28 V
P_O = 80 W

PACKAGE MECHANICAL DATA

PACKAGE STYLE M130



	MINIMUM INCHES/MM	MAXIMUM INCHES/MM		MINIMUM INCHES/MM	MAXIMUM INCHES/MM
A	1.010/25,65	1.050/26,67	I	.720/18,29	
B	.220/5,59	.230/5,84	J	.250/6,35	.290/7,37
C	.495/12,57	.505/12,83			
D	.003/0,08	.007/0,18			
E	.160/4,06	.180/4,57			
F	.622/15,80				
G	.100/2,54	.130/3,31			
H	.415/10,54	.425/10,80			