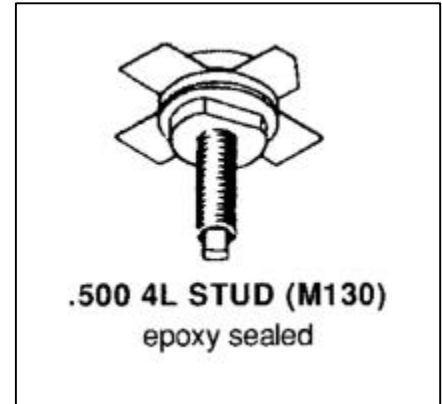


MS1204

**RF AND MICROWAVE TRANSISTORS
HF SSB APPLICATIONS**

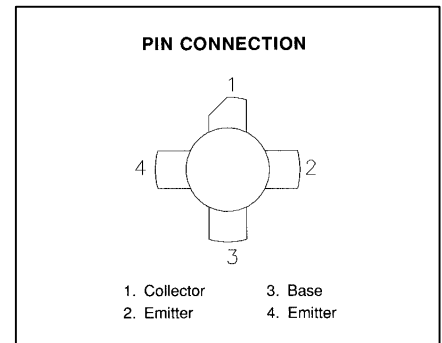
Features

- 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.



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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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

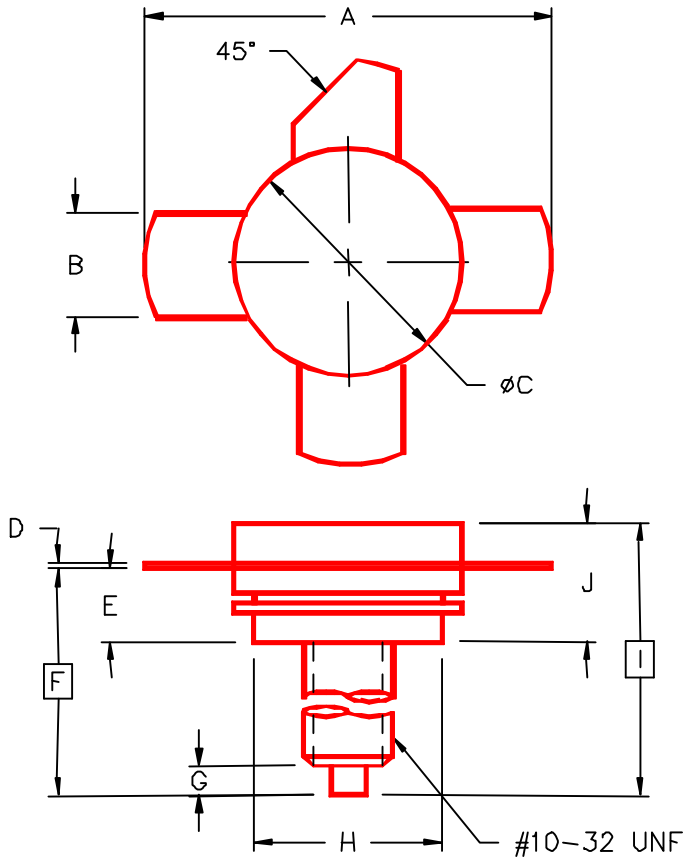
Symbol	Test Conditions	Value			Units
		Min.	Typ.	Max.	
P_{OUT}	f = 136 MHz V_{CE} = 28 V	80			W
G_P	f = 136 MHz V_{CE} = 28 V	9			dB
C_{OB}	f = 1 MHz V_{CB} = 30 V I_E = 0 V			150	PF

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			