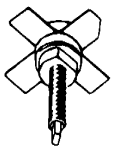
ADVANCED POWER TECHNOLOGY RF®

MS1329

RF & MICROWAVE TRANSISTORS
VHF FM APPLICATIONS



.380 4LSTUD(M135)
epoxy sealed

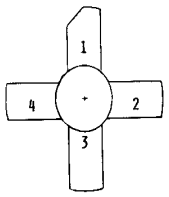
Features

- 150 MHz
- 28 VOLTS
- P_{OUT} = 60W
- G_P = 7.0 dB MINIMUM
- COMMON EMITTER CONFIGURATION

DESCRIPTION:

The MS1629 is an epitaxial silicon NPN transistor designed primarily for 12.5 V Class C, AM amplifier applications in the 118 – 136 MHz and 28 V Class C ground station transmitters. Emitter ballast resistors and gold metalitzation provide optimum VSWR capability.

PIN CONNECTION



1 collector
2 emitter
3 base
4 emitter

ABSOLUTE MAXIMUM RATINGS (Tcase = 25°C)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector- Base Voltage	65.0	V
V_{CEO}	Collector-Emitter Voltage	35.0	V
V_{EBO}	Emitter-Base Voltage	4.0	V
P_{DISS}	Power Dissipation	75.0	W
I_C	Collector current	6.5	A
T_J	Junction Temperature	+200	°C
T_{STG}	Storage Temperature	-65 to +150	°C

Thermal Data

$R_{TH(J-C)}$	Thermal Resistance Junction-Case	2.3	°C/W

ELECTRICAL SPECIFICATIONS (Tcase = 25°C)

STATIC

Symbol	Test Conditions		Value			
			Min.	Typ.	Max.	Unit
BVces	I_C = 200mA	V_{BE} = 0 mA	65.0	---	---	V
BVceo	I_C = 200 mA	I_B = 0 mA	35.0	---	---	V
BVebo	I_E = 10 mA	I_C = 0 mA	4.0	---	---	V
Icbo	V_{CB} = 30 V	I_E = 0 mA	---	---	2.0	mA
H_{FE}	V_{CE} = 5.0V	I_C = 500 mA	10	---	150	---

DYNAMIC

Symbol	Test Conditions			Value			
				Min.	Typ.	Max.	Unit
P_{OUT}	f = 150 MHz	P_{IN} = 12W	V_{CE} = 28V	60.0	---	---	W
P_G	f = 150 MHz	P_{IN} = 12W	V_{CE} = 28V	7.0	---	---	dB
C_{OB}	V_{CB} = 28V	f = 1 MHz		---	---	80.0	pf

IMPEDANCE DATA

FREQ	$Z_{IN}(\Omega)$	$Z_{CL}(\Omega)$
150 MHz	1.0 + j2.0	4.0 - j3.9

P_{OUT} = 60W
V_{CE} = 28V

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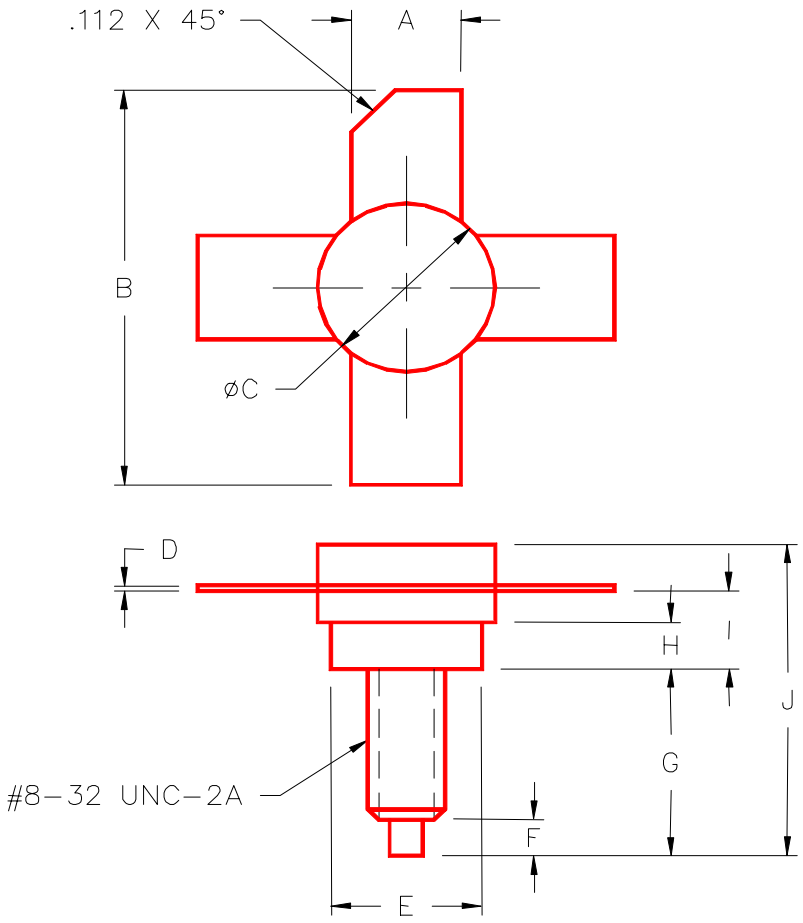
PACKAGE MECHANICAL DATA

PACKAGE STYLE M135



	MINIMUM INCHES/MM	MAXIMUM INCHES/MM		MINIMUM INCHES/MM	MAXIMUM INCHES/MM
A	.220/5,59	.230/5,84	I	.155/3,94	.175/4,45
B	.980/24,89		J		.750/19,05
C	.370/9,40	.385/9,78			
D	.004/0,10	.007/0,18			
E	.320/8,13	.330/8,38			
F	.100/2,54	.130/3,30			
G	.450/11,43	.490/12,45			
H	.090/2,29	.100/2,54			