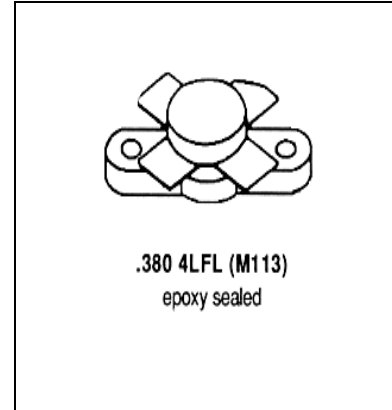


MS1226

RF & MICROWAVE TRANSISTORS HF SSB APPLICATIONS

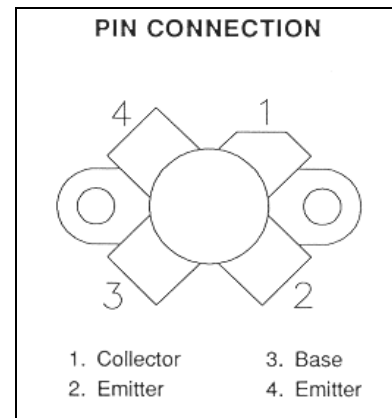
Features

30 MHz
 28 VOLTS
 IMD = -28 dB
 $P_{OUT} = 30$ WATTS
 $G_P = 18$ dB MINIMUM
 COMMON EMITTER CONFIGURATION



DESCRIPTION:

The MS1226 is a 28V epitaxial silicon NPN planar transistor designed primarily for SSB communications. This device utilizes emitter ballasting for improved ruggedness and reliability.



ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-base Voltage	65	V
V_{CEO}	Collector-emitter Voltage	36	V
V_{EBO}	Emitter-Base Voltage	4.0	V
I_C	Device Current	4.5	A
P_{DISS}	Power Dissipation	80	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	2.2	C/W
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ELECTRICAL SPECIFICATIONS (T_{case} = 25°C)

STATIC

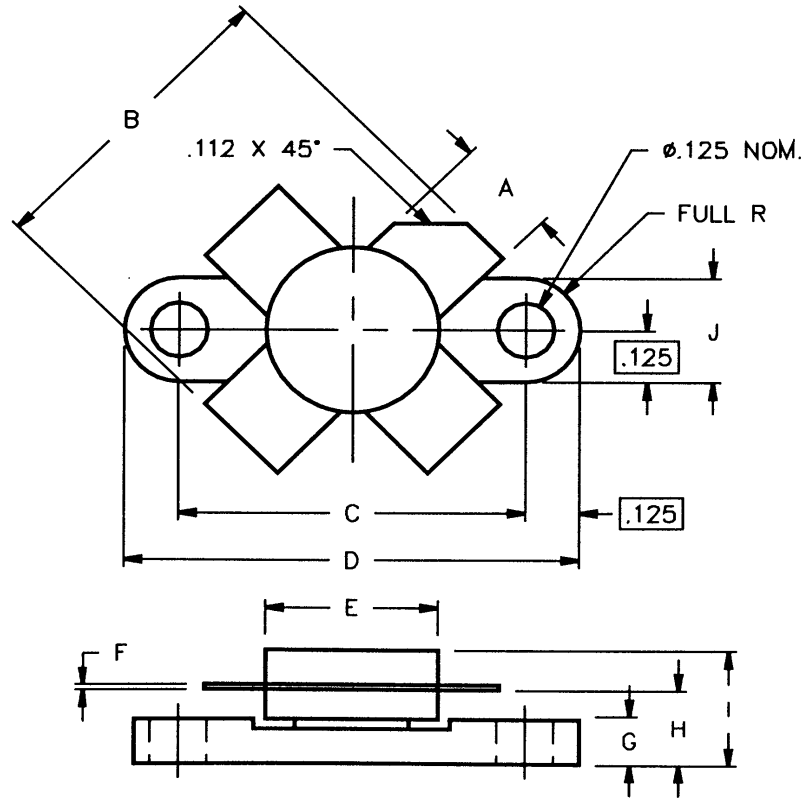
Symbol	Test Conditions		Value			Unit
			Min.	Typ.	Max.	
BV _{cbo}	I _C = 200 mA	I _E = 0 mA	65	---	---	V
BV _{ces}	I _C = 200 mA	V _{BE} = 0 V	65	---	---	V
BV _{ceo}	I _C = 200 mA	I _B = 0 mA	35	---	---	V
BV _{ebo}	I _E = 10 mA	I _C = 0 mA	4.0	---	---	V
I _{cbo}	V _{CB} = 30 V	I _E = 0 mA	---	---	1.0	mA
H _{FE}	V _{CE} = 5 V	I _C = 500 mA	10	---	200	---

DYNAMIC

Symbol	Test Conditions			Value			Unit
				Min.	Typ.	Max.	
P _{OUT}	f = 30 MHz	P _{IN} = 0.48W	V _{CE} = 28V	30	---	---	W
G _P	f = 30 MHz	P _{IN} = 0.48W	V _{CE} = 28V	18	---	---	dB
IMD	f = 30 MHz	P _{IN} = 0.48W	V _{CE} = 28V	---	----	-28	dB _C
Cob	f = 1 MHz	V _{CB} = 30V		---	---	65	pf
Conditions	V _{CE} = 28 V	I _{CQ} = 25 mA					

MS1226

PACKAGE MECHANICAL DATA



	MINIMUM INCHES/MM	MAXIMUM INCHES/MM		MINIMUM INCHES/MM	MAXIMUM INCHES/MM
A	.220/5,59	.230/5,84	I		.260/7,11
B	.785/19,94		J	.240/6,10	.255/6,48
C	.720/18,29	.730/18,54			
D	.970/24,64	.980/24,89			
E		.385/9,78			
F	.004/0,10	.006/0,15			
G	.085/2,16	.105/2,67			
H	.160/4,06	.180/4,57			