

MS1226

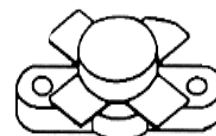
RF & MICROWAVE TRANSISTORS HF SSB APPLICATIONS

Features

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

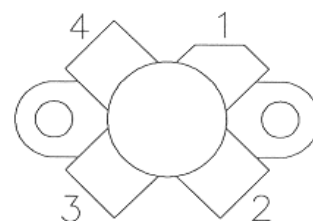
DESCRIPTION:

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.



.380 4LFL (M113)
epoxy sealed

PIN CONNECTION



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

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
---------------	----------------------------------	-----	-----

MS1226
ELECTRICAL SPECIFICATIONS (T_{case} = 25°C)
STATIC

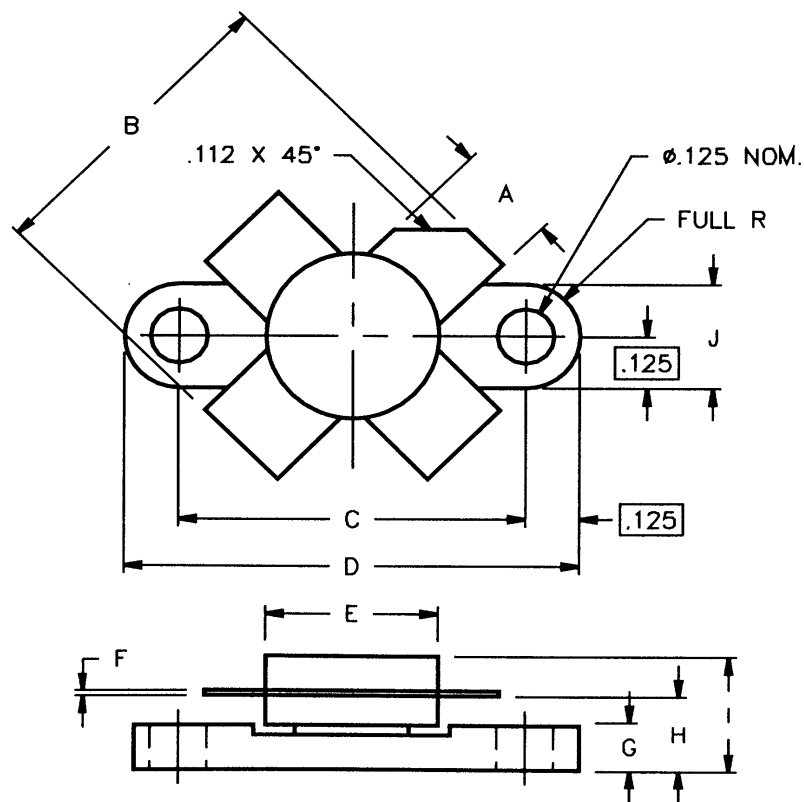
Symbol	Test Conditions		Value			Unit
			Min.	Typ.	Max.	
BV _{cbo}	I _C = 200 mA	I _E = 0 mA	65	---	---	V
BV _{ces}	I _C = 200 mA	V _{BE} = 0 V	65	---	---	V
BV _{ceo}	I _C = 200 mA	I _B = 0 mA	35	---	---	V
BV _{ebo}	I _E = 10 mA	I _C = 0 mA	4.0	---	---	V
I _{cbo}	V _{CB} = 30 V	I _E = 0 mA	---	---	1.0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