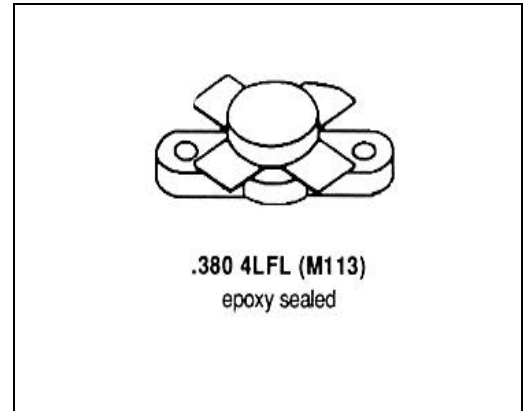


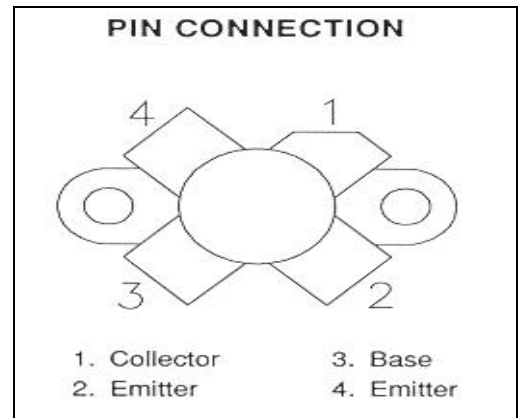
## Features

- 30 MHz
- 28 VOLTS
- IMD = -28 dB
- P<sub>OUT</sub> = 30 WATTS
- G<sub>p</sub> = 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 <sub>CBO</sub>	Collector-base Voltage	65	V
V <sub>CEO</sub>	Collector-emitter Voltage	36	V
V <sub>EBO</sub>	Emitter-Base Voltage	4.0	V
I <sub>C</sub>	Device Current	4.5	A
P <sub>DISS</sub>	Power Dissipation	80	W
T <sub>J</sub>	Junction Temperature	+200	°C
T <sub>STG</sub>	Storage Temperature	-65 to +150	°C

## Thermal Data

R <sub>TH(J-C)</sub>	Junction-case Thermal Resistance	2.2	°C/W
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Note : Above parameters , ratings , limits and conditions are subject to change.

**ELECTRICAL SPECIFICATIONS (T<sub>case</sub> = 25°C)**
**STATIC**

Symbol	Test Conditions			Value			Unit
				Min.	Typ.	Max.	
BV <sub>cbo</sub>	I <sub>C</sub> = 200 mA	I <sub>E</sub> = 0 mA	65	---	---		V
BV <sub>ces</sub>	I <sub>C</sub> = 200 mA	V <sub>BE</sub> = 0 V	65	---	---		V
BV <sub>ceo</sub>	I <sub>C</sub> = 200 mA	I <sub>B</sub> = 0 mA	35	---	---		V
BV <sub>ebo</sub>	I <sub>E</sub> = 10 mA	I <sub>C</sub> = 0 mA	4.0	---	---		V
I <sub>cbo</sub>	V <sub>CB</sub> = 30 V	I <sub>E</sub> = 0 mA	---	---	1.0		mA
H <sub>FE</sub>	V <sub>CE</sub> = 5 V	I <sub>C</sub> = 500 mA	10	---	200		---

**DYNAMIC**

Symbol	Test Conditions			Value			Unit
				Min.	Typ.	Max.	
P <sub>OUT</sub>	f = 30 MHz	P <sub>IN</sub> = 0.48W	V <sub>CE</sub> = 28V	30	---	---	W
G <sub>p</sub>	f = 30 MHz	P <sub>IN</sub> = 0.48W	V <sub>CE</sub> = 28V	18	---	---	dB
IMD	f = 30 MHz	P <sub>IN</sub> = 0.48W	V <sub>CE</sub> = 28V	---	---	-28	dB <sub>c</sub>
C <sub>ob</sub>	f = 1 MHz	V <sub>CB</sub> = 30V		---	---	65	pf
Condition	V <sub>CE</sub> = 28 V	I <sub>CQ</sub> = 25 mA					

Note : Above parameters , ratings , limits and conditions are subject to change .