



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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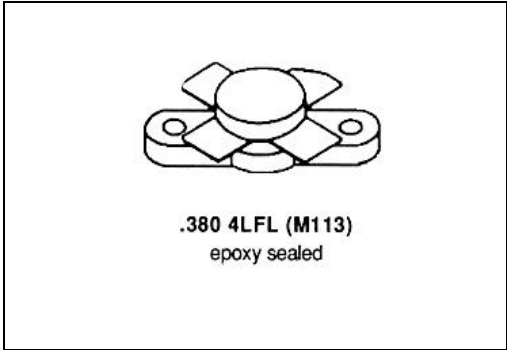


MS1227

RF & MICROWAVE TRANSISTORS HF SSB APPLICATIONS

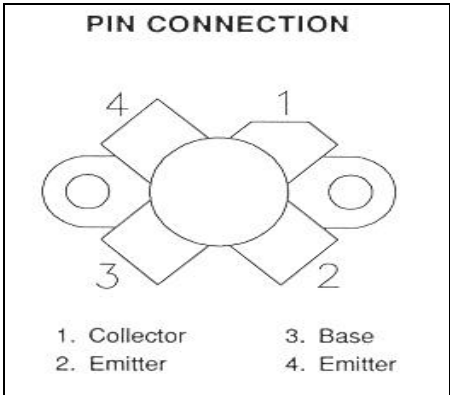
Features

- 30 MHz
- 12.5 VOLTS
- GOLD METALIZATION
- $P_{OUT} = 20$ W MINIMUM
- $G_P = 15$ dB
- COMMON EMITTER CONFIGURATION



DESCRIPTION:

The MS1227 is a 12.5V epitaxial 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	36	V
V_{CEO}	Collector-Emitter Voltage	18	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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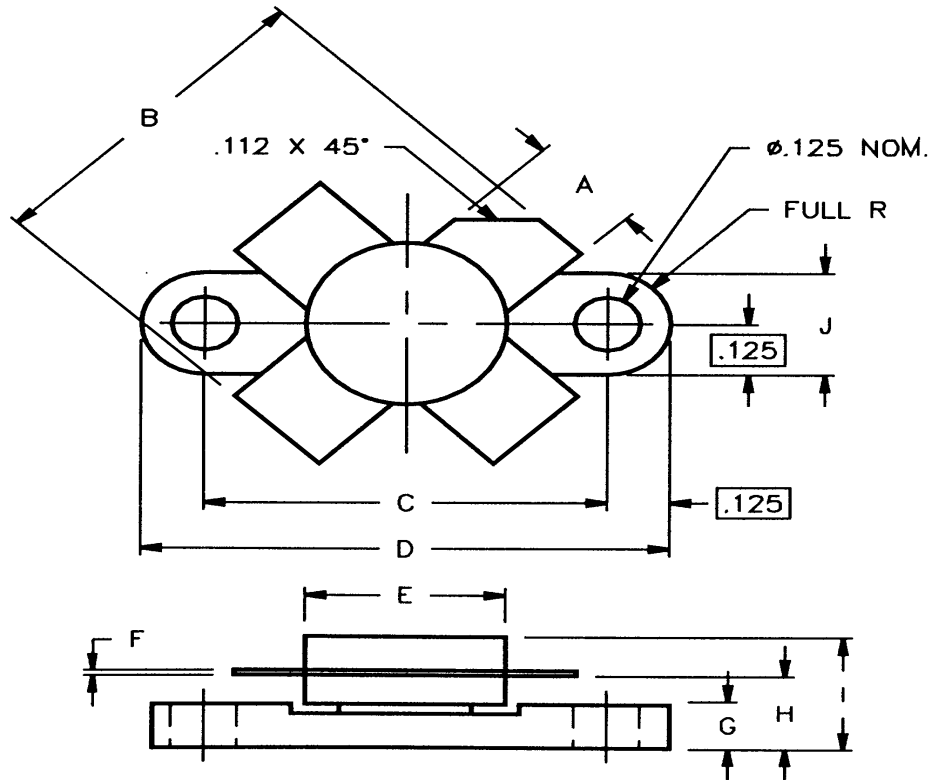
ELECTRICAL SPECIFICATIONS (T_{case} = 25 °C)
STATIC

Symbol	Test Conditions		Value			Unit
			Min.	Typ.	Max.	
BV_{cbo}	I_C = 50mA	I_E = 0mA	36	---	---	V
Bv_{ces}	I_C = 50mA	V_{BE} = 0V	36	---	---	V
Bv_{ceo}	I_C = 50mA	I_B = 0mA	18	---	---	V
Bvebo	I_E = 5mA	I_C = 0mA	4.0	---	---	V
I_{ces}	V_{CB} = 15V	I_E = 0mA	---	---	5	mA
H_{FE}	V_{CE} = 5V	I_C = 1A	10	---	200	---

DYNAMIC

Symbol	Test Conditions			Value			Unit
				Min.	Typ.	Max.	
P_{OUT}	f = 30MHz	V_{CC} = 12.5V	I_{CQ} = 25mA	20	---	---	W
G_p	f = 30MHz	V_{CC} = 12.5V	I_{CQ} = 25mA	15	---	---	dB
IMD	f = 30MHz	V_{CC} = 12.5V	I_{CQ} = 25mA	---	---	-30	dB
Cob	f = 1 MHz	V_{CB} = 30V		---	---	135	pf

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			