



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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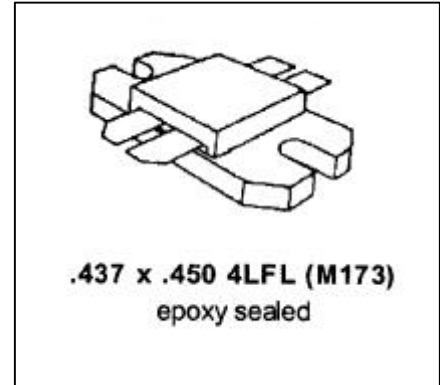


MS1582

RF & MICROWAVE TRANSISTORS TV/LINEAR APPLICATIONS

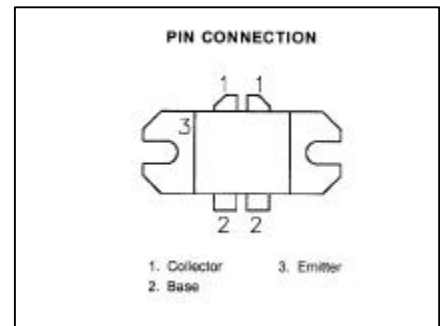
Features

- 470 - 860 MHz
- 28 VOLTS
- GOLD METALIZATION
- $P_{OUT} = 25$ WATT
- $G_P = 9.0$ dB MINIMUM
- INTERNAL INPUT MATCHING
- COMMON EMITTER CONFIGURATION



DESCRIPTION:

The MS1582 is a gold metallized epitaxial silicon NPN planar transistor designed for high linearity Class AB operation in UHF and Band IV, V television transmitters and transposers.



ABSOLUTE MAXIMUM RATINGS ($T_{case} = 25^{\circ}C$)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector - Base Voltage	45	V
V_{CEO}	Collector - Emitter Voltage	30	V
V_{EBO}	Emitter - Base Voltage	3.0	V
I_C	Device Current	8	A
P_{DISS}	Power Dissipation	135	W
T_J	Junction Temperature	+200	$^{\circ}C$
T_{STG}	Storage Temperature	-65 to +150	$^{\circ}C$

Thermal Data

$R_{TH(J-C)}$	Thermal Resistance Junction-case	1.3	$^{\circ}C/W$
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ELECTRICAL SPECIFICATIONS (T_{case} = 25 °C)

STATIC

Symbol	Test Conditions		Value			Unit
			Min.	Typ.	Max.	
BV _{cbo}	I _C = 50 mA	I _E = 0 mA	45	---	---	V
BV _{ceo}	I _C = 200 mA	I _B = 0 mA	30	---	---	V
BV _{ebo}	I _E = 10 mA	I _C = 0 mA	3.0	---	---	V
I _{ceo}	V _{CE} = 25 V	I _E = 0 mA	---	---	5	mA
HFE	V _{CE} = 5 V	I _C = 3 A	10	---	80	---

DYNAMIC

Symbol	Test Conditions			Value			Unit
				Min.	Typ.	Max.	
G _p	f = 860 MHz	P _{IN} = 3.1 W	V _{CE} = 25 V	9.0	---	---	dB
IMD ₃	f = 860 MHz	P _{OUT} = 25 W	V _{CE} = 25 V	---	---	-45	dB
P _{out}	f = 860 MHz	P _{IN} = 3.95 W	V _{CE} = 25 V	25	---	---	W
C _{OB}	f = 1 MHz	V _{CB} = 28 V		---	70	---	pf

Conditions: V_{CE} = 25 V I_C = 3.2 A

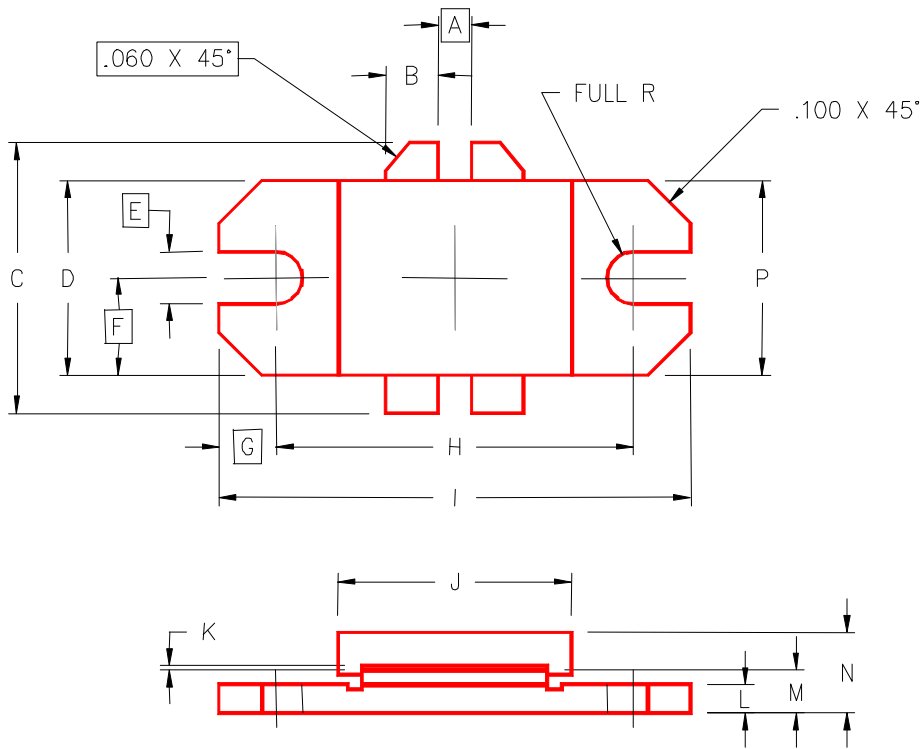
IMPEDANCE DATA:

FREQ	Z _{IN} (Ω)	Z _{CL} (Ω)
470 MHz	7.5 + j 9.5	25 + j 7.5
590 MHz	8.2 + j 7.5	15.6 - j 0.13
710 MHz	6.6 + j 6.2	11.9 - j 0.28
860 MHz	4.7 + j 3.0	6.7 - j 0.38

P_{OUT} = 25W
V_{CC} = 25V
I_C = 3.2 A

PACKAGE MECHANICAL DATA

PACKAGE STYLE M173



	MINIMUM INCHES/MM	MAXIMUM INCHES/MM		MINIMUM INCHES/MM	MAXIMUM INCHES/MM
A	.055/1,40		I	1.095/27,81	1.105/28,07
B	.120/3,05	.130/3,30	J	.525/13,34	.535/13,59
C	.785/19,94		K	.002/0,05	.006/0,15
D	.455/11,56	.465/11,81	L	.055/1,40	.065/1,65
E	.125/3,18		M	.080/2,03	.095/2,41
F	.230/5,64		N		.195/4,95
G	.128/3,25		P	.455/11,56	.465/11,81
H	.838/21,28	.850/21,59			