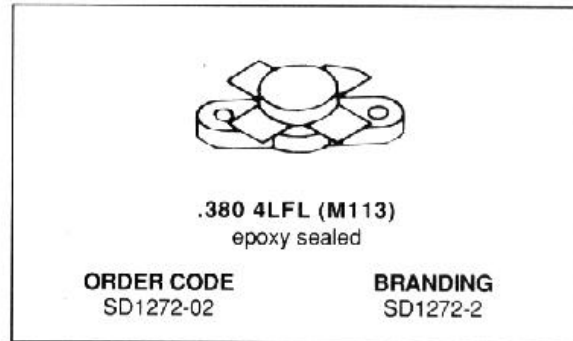
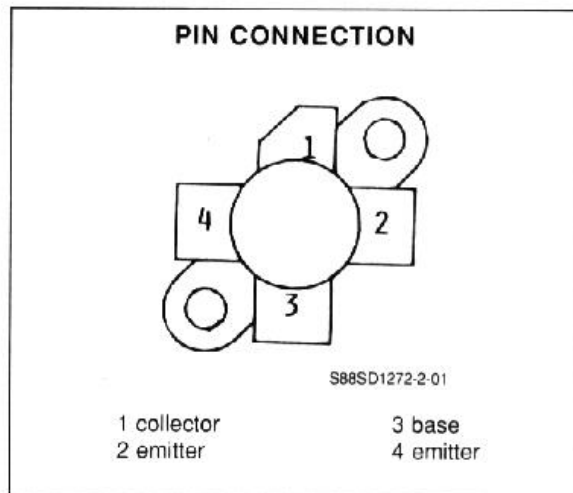


- FM CLASS C TRANSISTOR
- FREQUENCY 175MHz
- VOLTAGE 12.5V
- POWER OUT 25W
- POWER GAIN 9.2dB
- COMMON EMITTER



DESCRIPTION

The SD1272-2 is a 12.5V epitaxial silicon NPN planar transistor designed primarily for VHF communications. This device utilizes a nichrome aluminium metallization system to withstand very high VSWR under severe operating conditions.



ABSOLUTE MAXIMUM RATINGS (T_{case} = 25°C)

Symbol	Parameter	Value	Unit
V _{CBO}	Collector - Base Voltage	36.0	V
V _{CEO}	Collector - Emitter Voltage	18.0	V
V _{EBO}	Emitter - Base Voltage	4.0	V
I _C	Collector Current	4.0	A
P _{Tot}	Total Power Dissipation	65.0	W
T _{stg}	Storage Temperature	- 65 to + 150	°C
T _j	Junction Temperature	+ 200	°C

THERMAL DATA

R _{th(j-c)}	Junction-case Thermal Resistance	3.5	°C/W
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Note : Above parameters , ratings , limits and conditions are subject to change.

ELECTRICAL CHARACTERISTICS ($T_{case} = 25^{\circ}C$)

STATIC

Symbol	Test Conditions		Value			Unit
			Min.	Typ.	Max.	
BV_{CBO}	$I_C = 20mA$	$I_E = 0$	36.0			V
BV_{CEO}	$I_C = 50mA$	$I_B = 0$	18.0			V
BV_{EBO}	$I_E = 5mA$	$I_C = 0$	4.0			V
I_{CBO}	$V_{CB} = 15.0V$	$I_E = 0$			5.0	mA
h_{FE}	$V_{CE} = 5.0V$	$I_C = 250mA$	20.0			

DYNAMIC

Symbol	Test Conditions		Value			Unit
			Min.	Typ.	Max.	
P_O	$f = 175MHz$	$V_{CE} = 12.5V$	25.0			W
G_P	$f = 175MHz$	$V_{CE} = 12.5V$	9.2			dB
C_{OB}	$f = 1MHz$	$V_{CB} = 15.0V$			130.0	pF

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