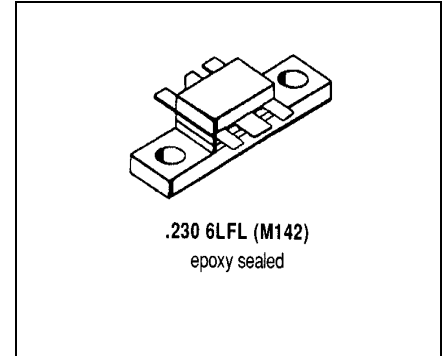


RF & MICROWAVE TRANSISTORS
800 / 900 MHz APPLICATIONS

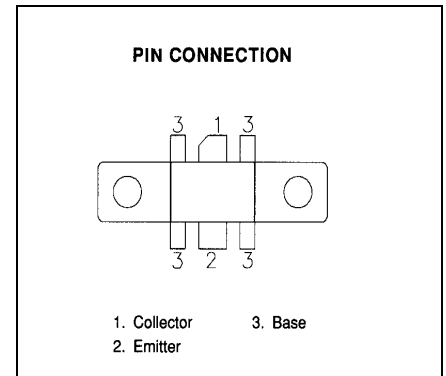
Features

- 960 MHz
- 24 VOLTS
- $P_{OUT} = 30$ WATTS
- $G_P = 7.0$ dB MINIMUM
- INPUT MATCHING
- COMMON BASE CONFIGURATION



DESCRIPTION:

The SD1495-03 is a silicon NPN transistor designed for 900 - 960 MHz base station applications. Gold metalization and internal impedance matching provide superior reliability and consistent broad band performance.



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

Symbol	Parameter	Value	Unit
V _{CBO}	Collector-Base Voltage	50	V
V _{CEO}	Collector-Emitter Voltage	30	V
V _{CES}	Collector-Emitter Voltage	50	V
V _{EBO}	Emitter-Base Voltage	4.0	V
I _C	Device Current	9.0	A
P _{DISS}	Power Dissipation	100	W
T _J	Junction Temperature	+200	°C
T _{STG}	Storage Temperature	-65 to + 150	°C

Thermal Data

R _{TH(J-C)}	Thermal Resistance Junction-case	1.5	°C/W
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ELECTRICAL SPECIFICATIONS (Tcase = 25°C)

STATIC

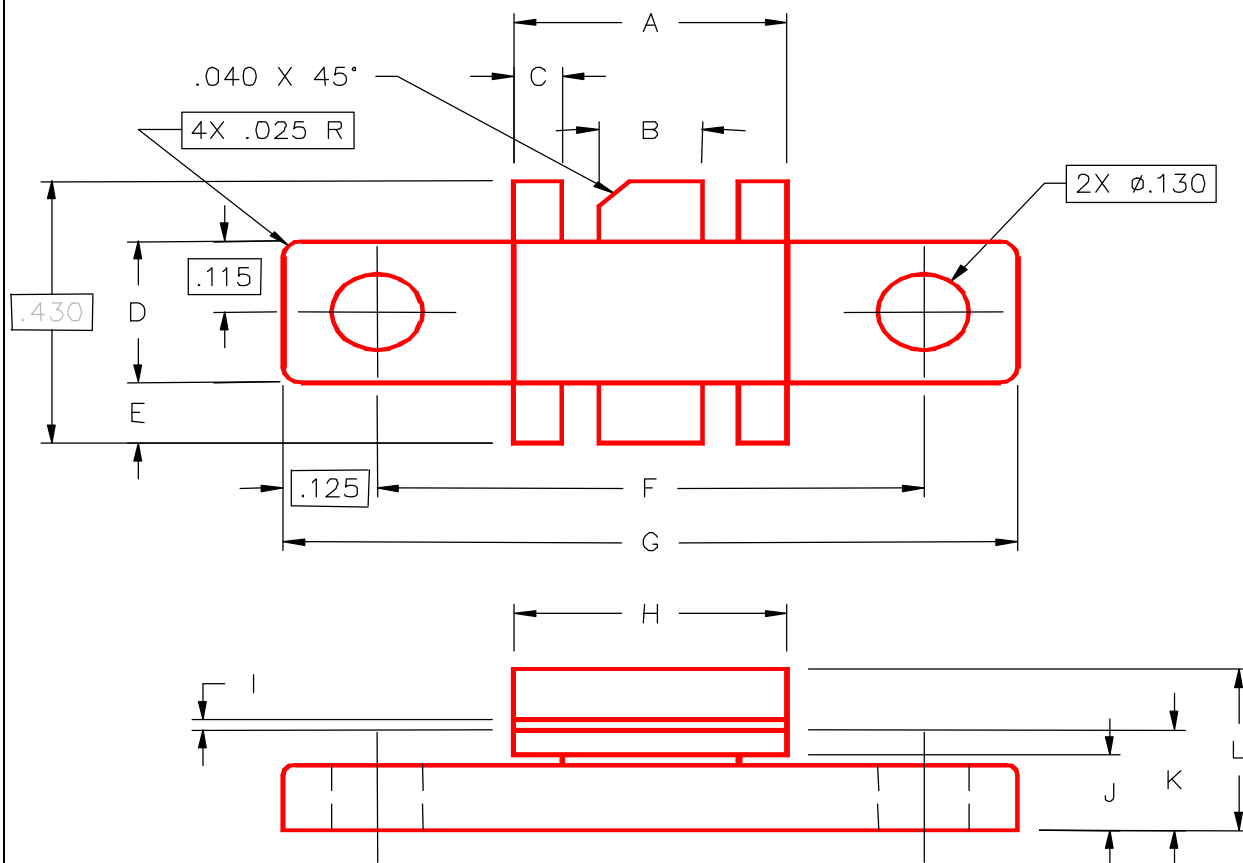
Symbol	Test Conditions		Value			Unit
			Min.	Typ.	Max.	
BV_{CES}	$I_C = 50mA$	$V_{BE} = 0V$	50	---	---	V
BV_{CEO}	$I_C = 50mA$	$I_B = 0mA$	30	---	---	V
BV_{EBO}	$I_E = 10mA$	$I_C = 0mA$	4.0	---	---	V
I_{CBO}	$V_{CB} = 15V$	$I_E = 0mA$	---	---	5	mA
HFE	$V_{CE} = 5V$	$I_C = 1A$	10	---	120	---

DYNAMIC

Symbol	Test Conditions			Value			Unit
				Min.	Typ.	Max.	
P_{OUT}	$f = 960MHz$	$P_{IN} = 6.0W$	$V_{CE} = 24V$	30	---	---	W
G_P	$f = 960MHz$	$P_{IN} = 6.0W$	$V_{CE} = 24V$	7.0	---	---	dB
η_C	$f = 960MHz$	$P_{IN} = 6.0W$	$V_{CE} = 24V$	50	---	---	%
C_{OB}	$f = 1 MHz$	$V_{CB} = 24V$		---	---	55	pf

PACKAGE MECHANICAL DATA

PACKAGE STYLE M142



	MINIMUM INCHES/MM	MAXIMUM INCHES/MM		MINIMUM INCHES/MM	MAXIMUM INCHES/MM
A	.355/9,02	.365/9,27	I	.004/0,10	.006/0,15
B	.115/2,92	.125/3,18	J	.120/3,05	.130/3,30
C	.075/1,91	.085/2,16	K	.160/4,06	.180/4,57
D	.225/5,72	.235/5,97	L	.230/5,84	.260/6,60
E	.090/2,29	.110/2,79			
F	.720/18,29	.730/18,54			
G	.970/24,64	.980/24,89			
H	.355/9,02	.365/9,27			