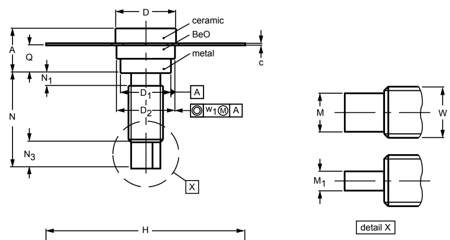
HG Semiconductors

HG RF POWER TRANSISTOR

UMIL3

ROHS Compliance,Silicon NPN POWER TRANSISTOR

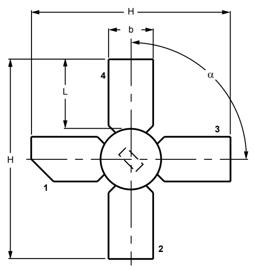


DESCRIPTION

Designed primarily for 225-400 MHz frequency range.

FEATURES

- Specified 28V, 400MHz Characteristics
- P_O = 3W
- G_P = 13 dB typ. at 3 W/400 MHz/28V
- VSWR = 30:1



1.Collector
2.EMITTER
3.BASE
4.EMITTER

DIMENSIONS

NOTE: ALL ELECTRODES ARE ISOLATED FROM FLANCE.

UNIT	A	b	c	D	D_1	D_2	H	L	M_1	M	N	N_1 max.	N_3	Q	W	w_1	α
mm	5.97 4.74	5.85 5.58	0.18 0.14	7.50 7.23	6.48 6.22	7.24 6.93	27.56 25.78	9.91 9.14	3.18 2.66	1.66 1.39	11.82 11.04	1.02	3.86 2.92	3.38 2.74	8-32 UNC	0.381	90°

MAXIMUM RATINGS

CHARACTERISTICS	SYMBOL	RATINGS	UNITS
Collector-Base Voltage	V_{CBO}	55	V
Collector-Emitter Voltage	V_{CES}	55	V
Collector-Emitter Voltage	V_{CEO}	30	V
Collector Current	I_C	0.7	A
Emitter-Base Voltage	V_{EBO}	4	V
Collector Power Dissipation	P_{DISS}	11	W
Junction Temperature	T_J	-65 to 175	°C
Storage Temperature Range	T_{STG}	-65 to 175	°C

ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNITS
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=20mA,I_B=0	55	-	-	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CES}$	I_C=20mA,V_{EB}=0	55	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	I_E=5mA,I_C=0	4	-	-	V
Collector Cutoff Current	I_{CBO}	V_{CB} = 30 V, I_E = 0			0.5	mA
DC Current Gain	h_{FE}	V_{CE}=5V,I_C=0.1A	10.0	45.0	150.0	
Collector Output Capacitance	C_{Ob}	V_{CB}=28V,I_E=0 f=1MHz	-	5	-	pF
Power Gain	G_P	V_{CC}=28V,P_{OUT}=3W f=400MHz	11.8	13.0	-	dB
Collector Efficiency	η_C		-	60.0	-	%

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