HG Semiconductors

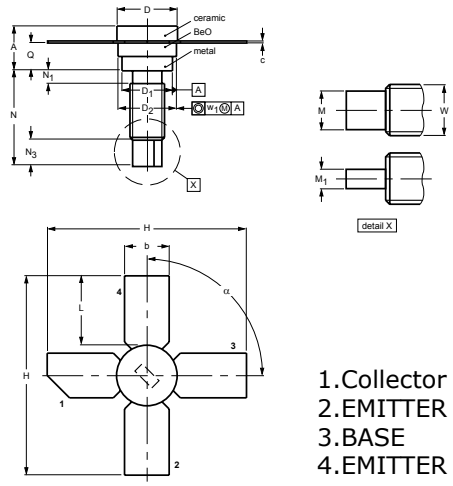
HG RF POWER TRANSISTOR
MRF321
ROHS Compliance,Silicon NPN POWER TRANSISTOR

DESCRIPTION

Designed primarily for wideband large–signal driver and predriver amplifier stages in 200–500 MHz frequency range.

FEATURES

- Specified 28V, 400MHz Characterist
- P_O = 10W PEP
- G_P = 10 dB min. at 10 W/400 MHz
- Omnigold™ Metalization System



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}	65	V
Collector-Emitter Voltage	V_{CES}	65	V
Collector-Emitter Voltage	V_{CEO}	40	V
Collector Current	I_C	1.1	A
Emitter-Base Voltage	V_{EBO}	4	V
Collector Power Dissipation	P_{DISS}	27	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	40	-	-	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CES}$	I_C=20mA,V_{EB}=0	65	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	I_E=2mA,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=0.5A	10	-	120	
Collector Output Capacitance	C_{ob}	V_{CB}=28V,I_E=0 f=1MHz	-	-	15	pF
Power Gain	G_P	V_{CC}=28V,P_{OUT}=10W	10.0	-	-	dB
Collector Efficiency	η_C	I_{idle}=100mA,f=400M	-	60.0		%

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