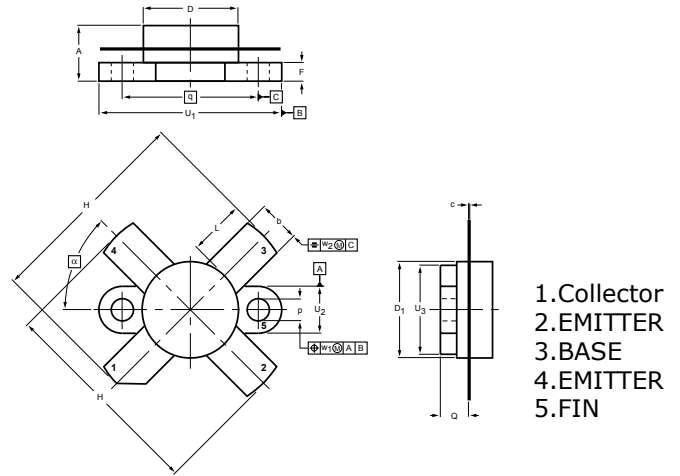


DESCRIPTION

Designed primarily for 2-30MHz SSB linear power amplifier applications (low supply voltage use)

FEATURES

- Specified 12.5V, 28MHz Characteristics
- $P_o = 100W$ PEP
- $G_p = 15.2$ Typ. at 100 W/28 MHz
- IMD3 = -24 dBc max. at 100 W(PEP)
- Omnigold™ Metalization System



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

DIMENSIONS

NOTE: ALL ELECTRODES ARE ISOLATED FROM FLANGE.

UNIT	A	b	c	D	D ₁	F	H	L	p	Q	q	U ₁	U ₂	U ₃	w ₁	w ₂	α
mm	7.27 6.17	5.82 5.56	0.16 0.10	12.86 12.59	12.83 12.57	2.67 2.41	28.45 25.52	7.93 6.32	3.30 3.05	4.45 3.91	18.42	24.90 24.63	6.48 6.22	12.32 12.06	0.51	1.02	45°
inches	0.286 0.243	0.229 0.219	0.006 0.004	0.506 0.496	0.505 0.495	0.105 0.095	1.120 1.005	0.312 0.249	0.130 0.120	0.175 0.154	0.725	0.98 0.97	0.255 0.245	0.485 0.475	0.02	0.04	

MAXIMUM RATINGS

CHARACTERISTICS	SYMBOL	RATINGS	UNITS
Collector-Base Voltage	V_{CBO}	45	V
Collector-Emitter Voltage	V_{CES}	45	V
Collector-Emitter Voltage	V_{CEO}	18	V
Collector Current	I_C	25	A
Emitter-Base Voltage	V_{EBO}	4	V
Collector Power Dissipation	P_{DISS}	250	W
Junction Temperature	T_J	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	$V_{(BR)CEO}$	$I_C=100mA, I_B=0$	18	-	-	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CES}$	$I_C=100mA, V_{EB}=0$	45	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=1mA, I_C=0$	4	-	-	V
DC Current Gain	h_{FE}	$V_{CE}=5V, I_C=10A$	10	-	150	
Collector Output Capacitance	C_{ob}	$V_{CB}=12.5V, I_E=0$ $f=1MHz$	-	700	-	pF
Power Gain	G_p	$V_{CC}=12.5V, P_{OUT}=100W$ $I_{idle}=100mA, f=28MHz$	13.0	15.2	-	dB
Collector Efficiency	η_c		35	-	-	%
Intermodulation Distortion	IMD3		-	-	-24	dBc
Series Equivalent Input Impedance	Z_{IN}	$V_{CC}=12.5V, P_{OUT}=100W$	-	1.45 - j0.95	-	Ω
Series Equivalent Output Impedance	Z_{OUT}	$f=28MHz$	-	1.45 - j1.0	-	Ω

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