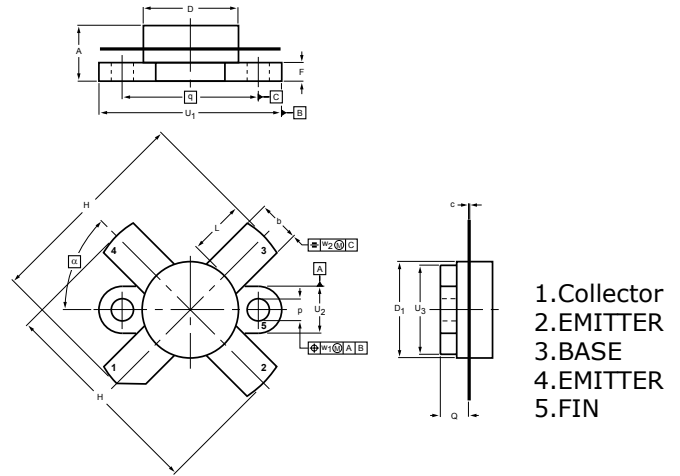


### DESCRIPTION

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 <sub>1</sub>	F	H	L	p	Q	q	U <sub>1</sub>	U <sub>2</sub>	U <sub>3</sub>	w <sub>1</sub>	w <sub>2</sub>	$\alpha$
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	$\eta_c$		35	-	-	%
Intermodulation Distortion	IMD3		-	-	-24	dBc
Series Equivalent Input Impedance	$Z_{IN}$	$V_{CC}=12.5V, P_{OUT}=100W$	-	1.45 - j0.95	-	$\Omega$
Series Equivalent Output Impedance	$Z_{OUT}$	$f=28MHz$	-	1.45 - j1.0	-	$\Omega$

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