HG Semiconductors

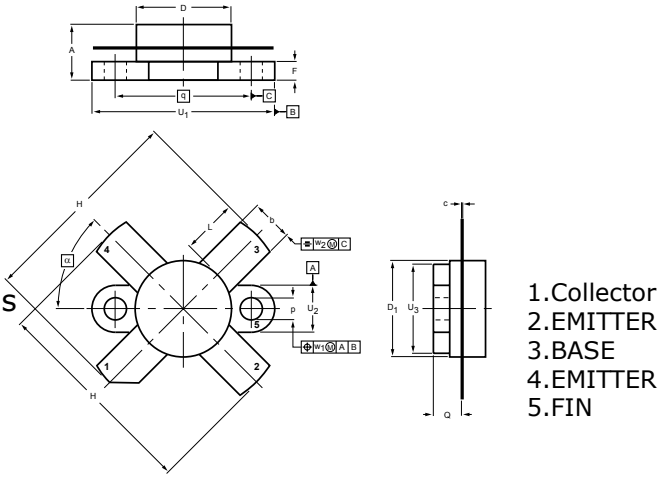
HG RF POWER TRANSISTOR

BLW77

ROHS Compliance,Silicon NPN POWER TRANSISTOR

DESCRIPTION

Designed primarily for HF/VHF power amplifier application



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

FEATURES

- Specified 28V, 28MHz/87.5M Characteristics
- P_O = 130W
- G_P = 12 dB min. at 130 W/28 MHz
- G_P = 7.5 dB typ. at 130 W/87.5 MHz

DIMENSIONS

NOTE: ALL ELECTRODES ARE ISOLATED FROM FLANCE.

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}	75	V
Collector-Emitter Voltage	V_{CES}	75	V
Collector-Emitter Voltage	V_{CEO}	35	V
Collector Current(peak)	I_{CM}	30	A
Emitter-Base Voltage	V_{EBO}	4	V
Collector Power Dissipation	P_{DISS}	250	W
Junction Temperature	T_J	-65 to 200	°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	75	-	-	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CES}$	I_C=50mA,V_{EB}=0	75	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	I_E=10mA,I_C=0	4	-	-	V
Collector Cutoff Current	I_{CBO}	(V_{CB} = 30 V, I_E = 0)	-	-	5	mA
DC Current Gain	h_{FE}	V_{CE}=5V,I_C=7A	10	-	120	
Collector Output Capacitance	C_{Ob}	V_{CB}=28V,I_E=0 f=1MHz	-	-	280	pF
Power Gain	G_P	V_{CC}=28V,P_{OUT}=130W, f=28MHz	12.0	-	-	dB
Collector Efficiency	η_C		40	-		%

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