

9097250 TOSHIBA (DISCRETE/OPTO)

56C 07430 0 T-31-2/

SILICON NPN EPITAXIAL PLANAR TYPE

2SC994

Unit in mm

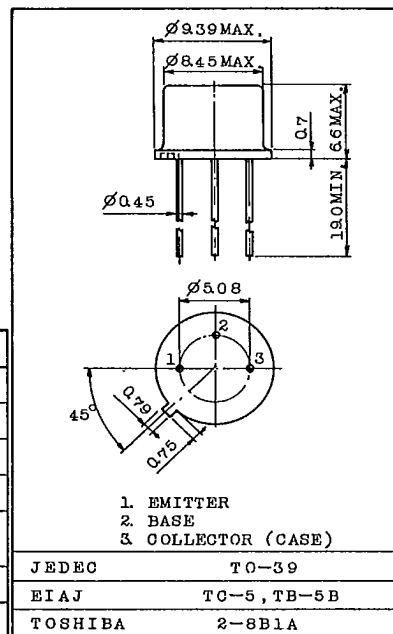
VHF BAND POWER AMPLIFIER APPLICATIONS.

FEATURES :

- Output Power : $P_o=0.95W$ (Min.)
($f=175MHz$, $V_{CC}=13.5V$, $P_i=40mW$)

MAXIMUM RATINGS ($T_a=25^\circ C$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	36	V
Collector-Emitter Voltage	V_{CEO}	15	V
Emitter-Base Voltage	V_{EBO}	3	V
Collector Current	I_C	0.1	A
Collector Power Dissipation ($T_a=25^\circ C$)	P_C	0.6	W
Junction Temperature	T_j	175	$^\circ C$
Storage Temperature Range	T_{stg}	-65 ~ 175	$^\circ C$



Weight : 1.1g

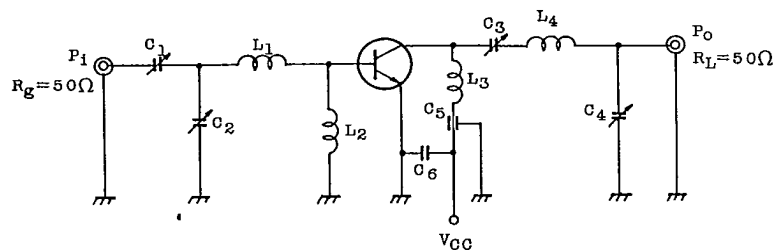
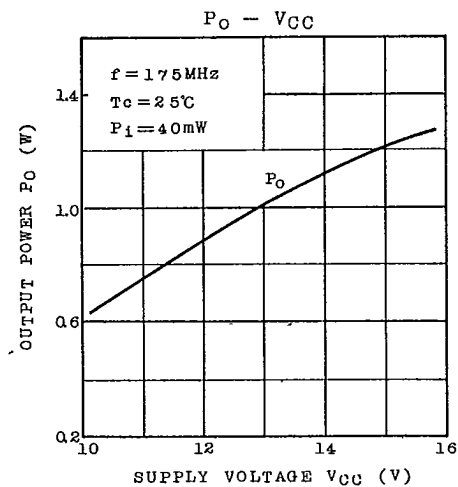
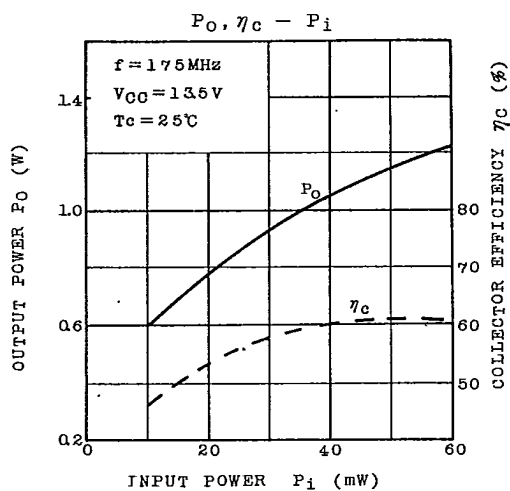
ELECTRICAL CHARACTERISTICS ($T_a=25^\circ C$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=15V$, $I_E=0$	-	-	1.0	μA
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=0.1mA$, $I_E=0$	36	-	-	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=5mA$, $I_B=0$	15	-	-	V
DC Current Gain	h_{FE}	$V_{CE}=3V$, $I_C=100mA$	20	-	400	-
Collector Output Capacitance	C_{ob}	$V_{CB}=10V$, $I_E=0$, $f=1MHz$	-	3.8	5	pF
Output Power	P_o	(Fig.) $V_{CC}=13.5V$, $f=175MHz$, $P_i=40mW$	0.95	1.05	-	W
Power Gain	G_{pe}		13.7	14.2	-	dB

TOSHIBA CORPORATION

9097250 TOSHIBA (DISCRETE/OPTO)

56C 07431 DT-31-21

2SC994Fig. P_O TEST CIRCUIT C_1, C_2, C_3, C_4 : 3.5 ~ 30pF C_5 : 0.001 μ F FEED THROUGH C_6 : 0.05 μ F CERAMIC CONDENSER L_1, L_3 : ϕ 1.2 SILVER PLATED COPPER WIRE, 8ID, 1T L_2 : 1 μ H CHOLK COIL L_4 : ϕ 1.2 SILVER PLATED COPPER WIRE, 8ID, 5T

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