

2SC2173

FEATURES:

- . Output Power : $P_O=25W(\text{Min.})$
($f=470\text{MHz}$, $V_{CC}=12.6V$, $P_i=10W$)
. 100% Tested for Load Mismatch Stress at All Phase
Angles with 30:1 VSWR @ $V_{CC}=12.6V$, $P_i=10W$, $f=470\text{MHz}$

Unit in mm

(4 leads)

Top View Dimensions:

- Overall width: 27.0 ± 0.8
- Overall height: 27.0 ± 0.8
- Lead length: 5.7 ± 0.2
- Lead angle: 45°
- Lead thickness: 0.1
- Lead pitch: 2.4 MAX.
- Lead width: 4.25 ± 0.25

Side View Dimensions:

- Overall height: 11.8 ± 0.6
- Lead height: 2.9 ± 0.5
- Base thickness: 1.3 MAX.
- Wrench flat width: 1.5 ± 0.3

Detail View Dimensions:

- Wrench flat width: 1.5 ± 0.3
- Wrench flat height: 0.1
- Wrench flat diameter: $\phi 9.8 \text{ MAX.}$
- Wrench flat thread: $M4 \times 0.7$
- Wrench flat length: 2.7 NORM

JEDEC

EIAJ

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2-10G1A

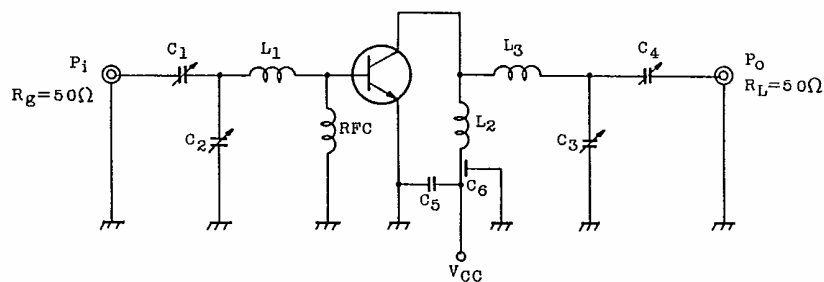
Mounting Kit No. AC57
Weight : 3.3g

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=15V, I_E=0$	—	—	1	mA
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=10mA, I_E=0$	35	—	—	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=25mA, I_B=0$	17	—	—	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=1mA, I_C=0$	3.5	—	—	V
DC Current Gain	h_{FE}	$V_{CE}=5V, I_C=3A$	10	—	—	
Collector Output Capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$	—	—	80	pF
Output Power	P_o	(Fig.)	25	28	—	W
Power Gain	G_{pe}	$V_{CC}=12.6V, f=470MHz,$	3.9	4.5	—	dB
Collector Efficiency	η_c	$P_i=10W$	60	—	—	%
Series Equivalent Input Impedance	Z_{IN}	$V_{CC}=12.6V, f=470MHz,$	—	$1.1+j2.6$	—	Ω
Series Equivalent Output Impedance	Z_{OUT}	$P_o=25W$	—	$3.7+j0.8$	—	Ω

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Fig. $f=470\text{MHz}$ P_O TEST CIRCUIT



C_1, C_3 : 1.5 ~ 5pF

C_2, C_4 : 2.2~15pF

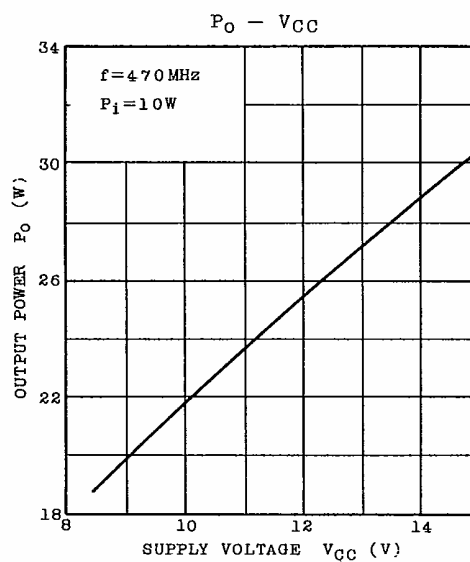
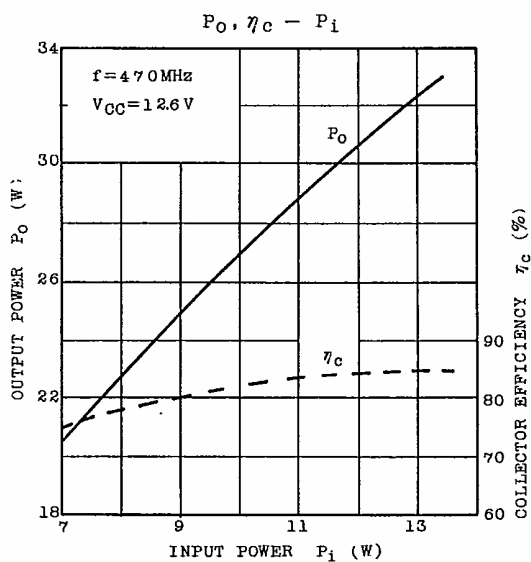
C_5 : 0.01 μ F

C_6 : 1000pF FEED THROUGH

L_1, L_3 : 5mm $\times$ 15mm COPPER PLATE

L_2 : ϕ 1 SILVER PLATED COPPER WIRE, 10ID, $\frac{1}{2}$ T

RFC : ϕ 1 ENAMEL COATED COPPER WIRE, 3ID, 5T



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