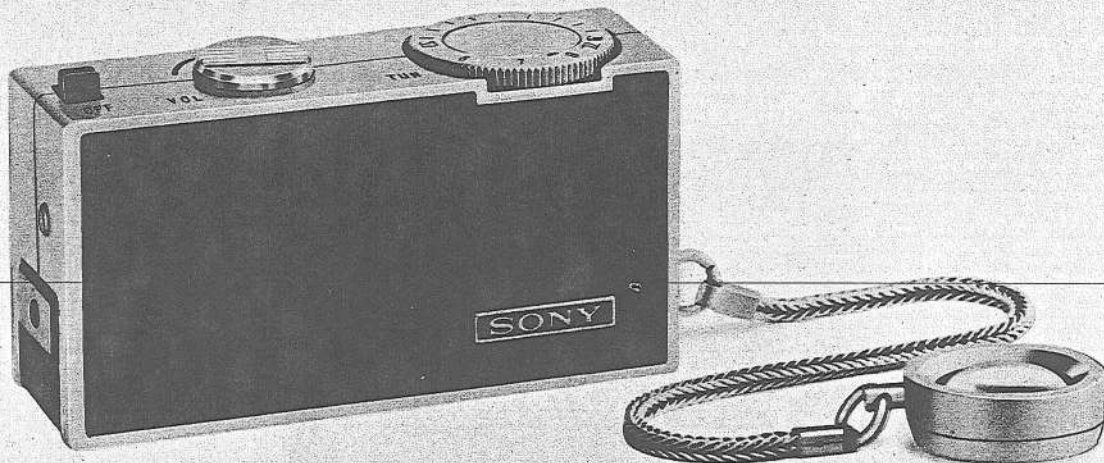


ICR-100 BC-100



Specifications

(ICR-100)

Circuit:	1 IC, 3 Transistor Superheterodyne
Frequency Coverage:	530~1,605 kc (566~187 m)
Intermediate Frequency:	455 kc
Antenna System:	Built-in Ferrite Bar Antenna
Maximum Sensitivity: (at 10 mW output)	560 μ V/m
Selectivity:	20 dB at 10 kc off resonance, at 1,400 kc.
Output Power:	50 mW (undistorted) 70 mW (maximum)
Current Drain:	9 mA at zero signal, 40 mA at 50 mW output
Power Source:	Nickel Cadmium Battery 2.5V in total. Rechargeable by using SONY Charger BC-100 for House Current.
Speaker:	40 \times 28 mm PM dynamic 8 Ω
Dimensions:	1-7/32 (H) \times 2-9/32 (W) \times 23/32" (D) (31 \times 58 \times 18 mm)
Weight:	3.2 ozs. (90 gs.)

(BC-100)

Input:	AC 100~125 V 50/60 c/s
Output:	DC 5 mA Maximum
Dimensions:	2 (H) \times 3-11/16 (W) \times 1-1/8" (D) (50 \times 94 \times 28 mm)
Weight:	75 gs.

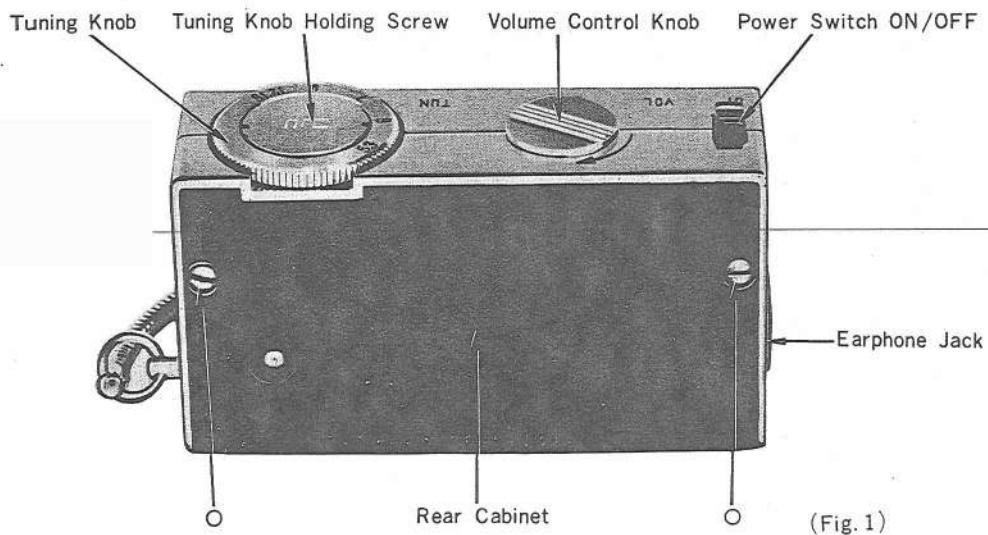
SONY[®]
SERVICING GUIDE

Removal of Back Cabinet

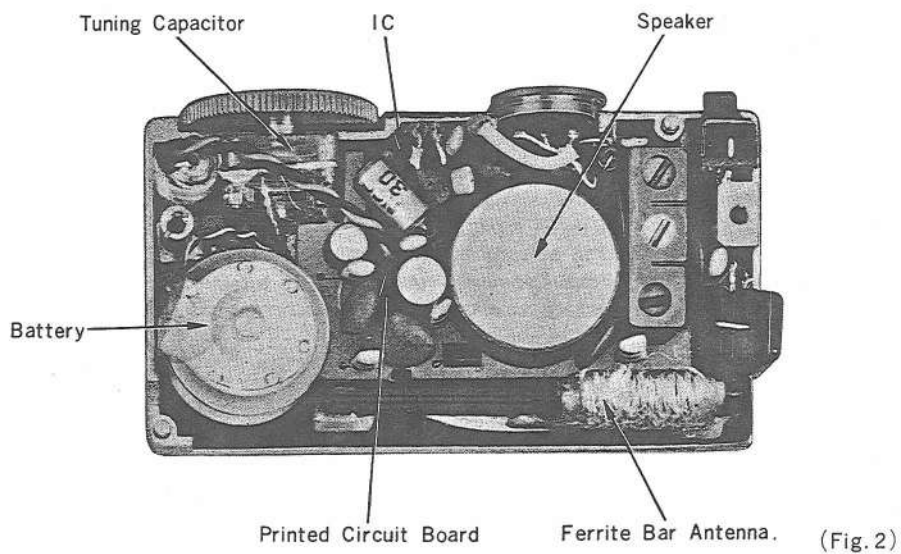
- (1) Remove the Tuning Knob Holding Screw shown in Fig. 1.
- (2) Remove the Tuning Knob shown in Fig. 1.
- (3) Remove the Tuning Capacitor Holding Screw.
- (4) Remove the two Rear Cabinet Holding Screws marked with ○ shown in Fig. 1.

Removal of Printed Circuit Board

- (1) Remove the Circuit Board.
- (2) Take out the Circuit Board from the Cabinet gently taking care not to cut the Lead.

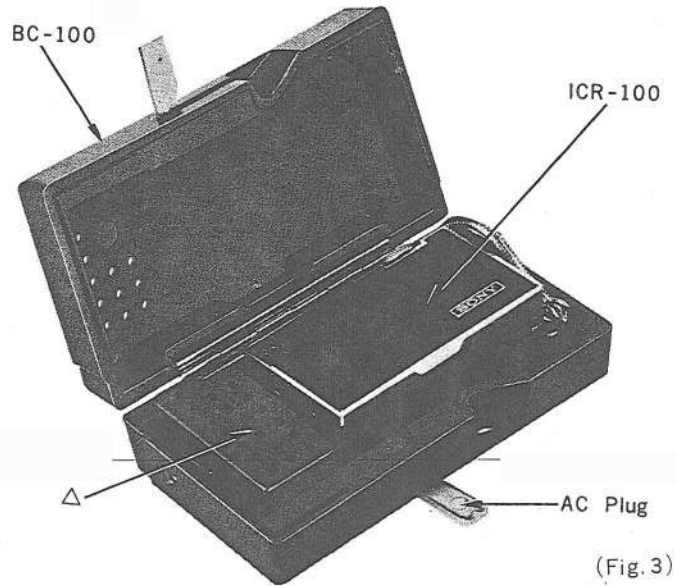


Interior View

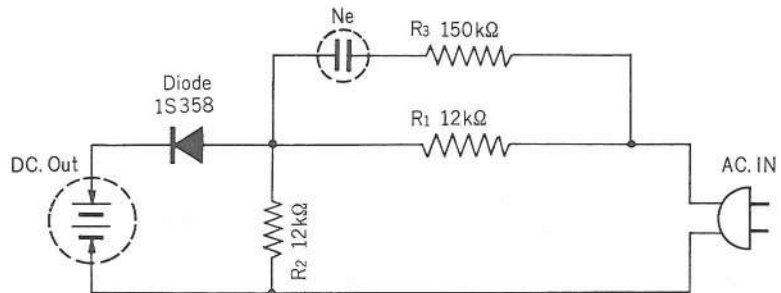


Removal of Neon Lamp and Resistors (BC-100)

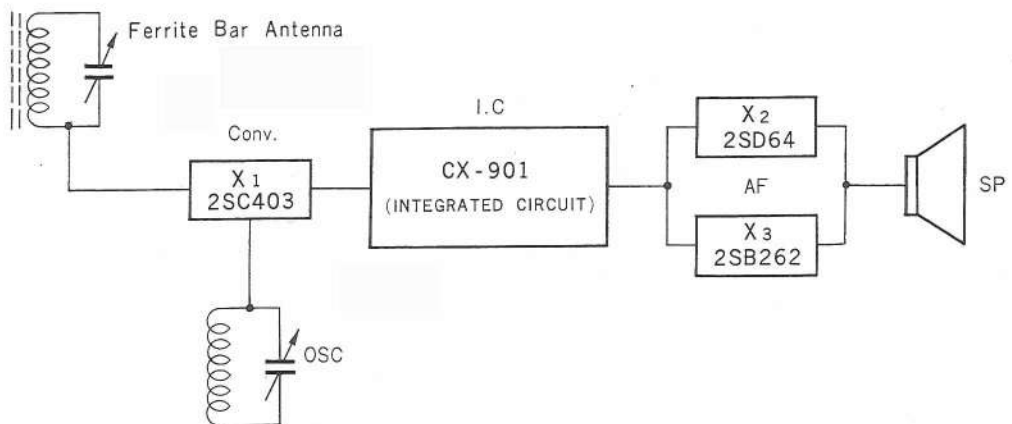
- (1) Remove the Cover marked with Δ shown in Fig. 3.
- (2) Unsolder the Neon Lamp, Diode and Resistors.



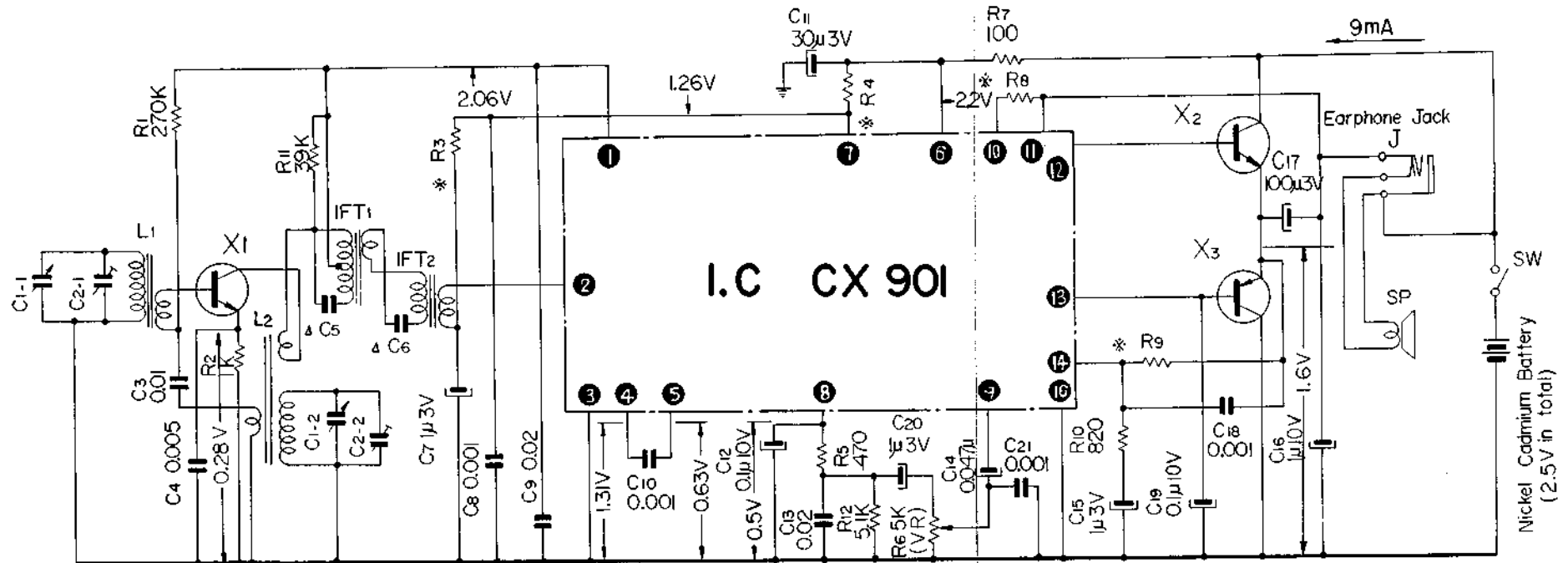
BC-100 Circuit Schematic



ICR-100 Block Diagram



Circuit Schematic



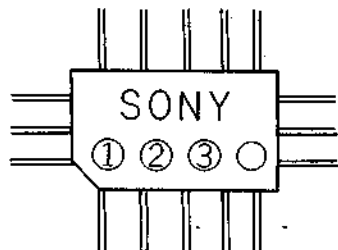
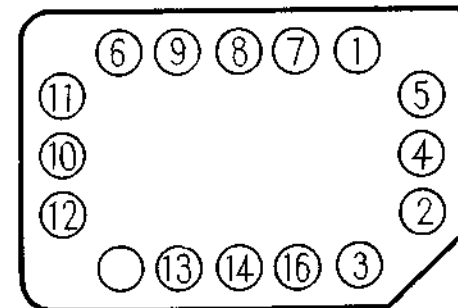
X1 2SC403 * To be Adjusted
 Δ Built in IFT

X2 2SD64 X3 2SB262

Color Code of IC

IC Mark	Resistor No.	Brown	Red	Orange	Yellow	Green	Blue	Purple	Gray	White	Black	Gold	Silver
①	R4 (kΩ)	6.2	6.8	7.5	8.2	9.1	10	11	12	13	15		
②	R8 (kΩ)	4.7	5.6	6.8	8.2	10	12	15	18	22	27	33	39
③	R9 (kΩ)	91	100	110	120	130	150	160	180	200	220	240	270

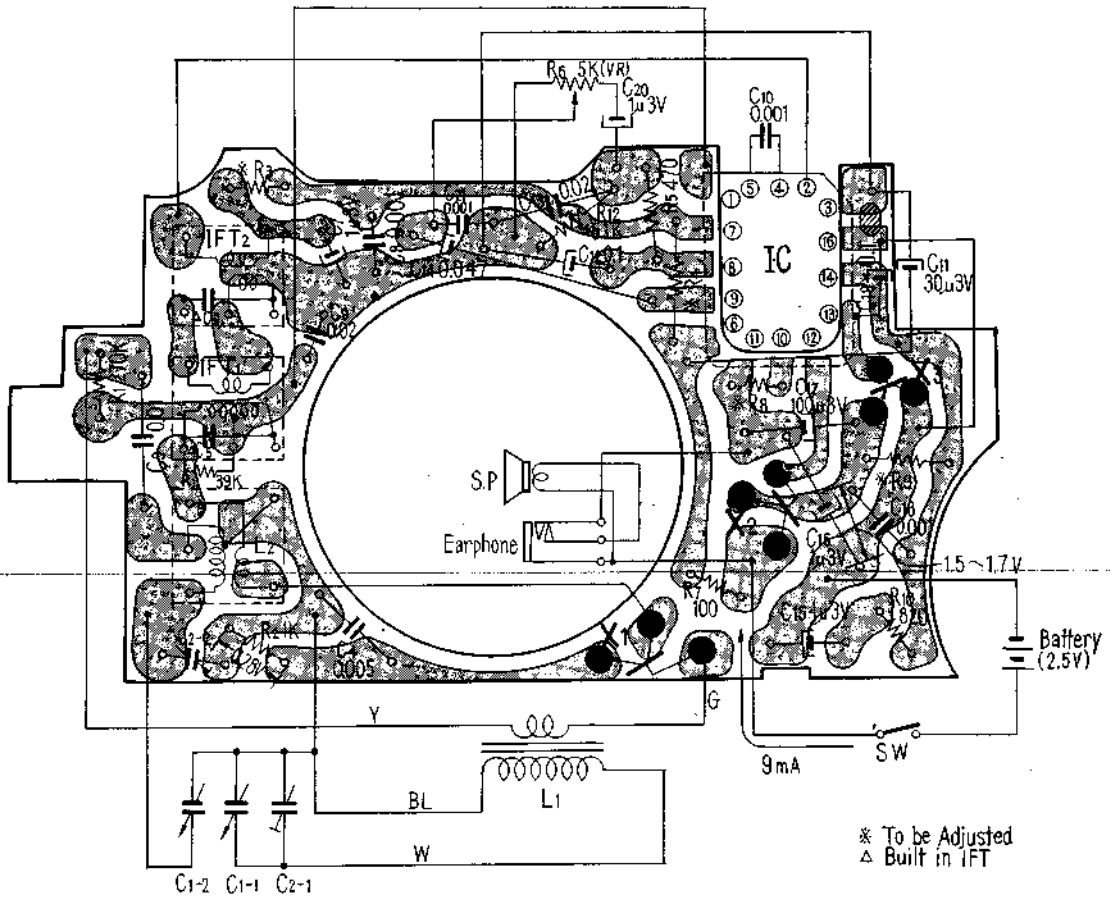
I.C.
 -Pin Side-



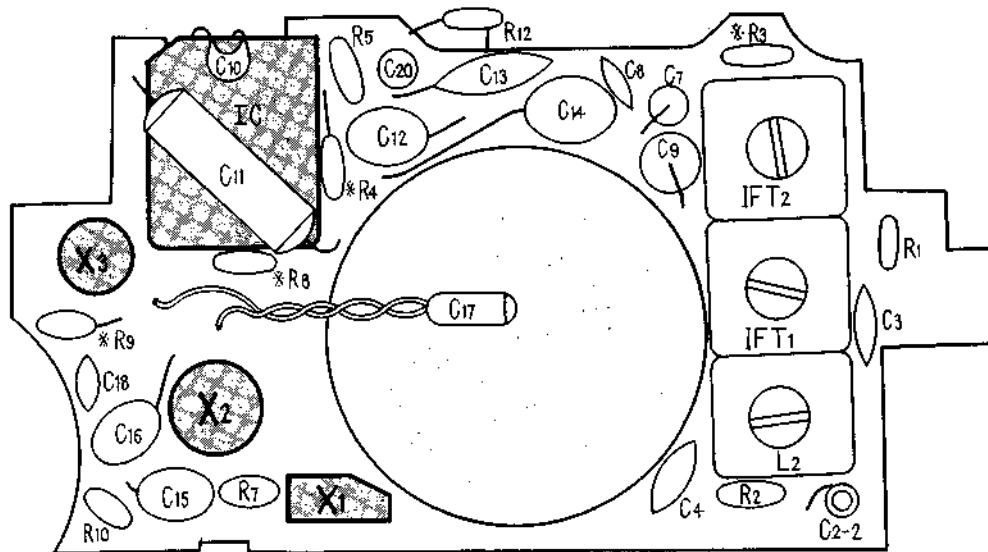
As for R₁, R₈ and R₉ of Adjustable Resistors, select the ones with the following values according to the respective color codes on the IC.

Mounting Diagram

—Printed Side—



—Parts Side—



R11, C19 Mounted on the Printed side

Frequency Coverage and Tracking Adjustment

Adj. Item	SSG (Standard Signal Generator) Coupling	SSG Freq.	Receiver Dial Setting	Connect VTVM	Adjust	Remarks
Frequency Coverage	Loop Antenna	520 Kc (1000 c/s 30% AM Mod)	Fully Left	Across 8Ω Load Resistor	OSC Coil (L ₂)	Adjust for maximum deflection. Volume Control: MAX Power Supply: DC. 2.5V
		1,680 Kc (" ")	Fully Right		OSC Trimmer (C ₂₋₃)	
Tracking	—ditto—	620 Kc (" ")	Tune to 620Kc signal	—ditto—	ANT Coil (L ₁)	—ditto—
		1,400 Kc (" ")	Tune to 1,400Kc signal		ANT Trimmer (C ₂₋₁)	

Electrical Parts List

(ICR-100)

Part No.	Symbol	Description	Part No.	Symbol	Description
1-401-298-11	L ₁	Coil, Ferrite Bar Antenna			Capacitor
1-405-296-11	L ₂	" OSC	1-151-151-11	C ₁₋₁₋₂	Tuning Capacitor, 2 gang
1-403-127-11	IFT ₁	Transformer, IF (Primary)	1-141-036-12	C ₂₋₁	Wired Trimmer Capacitor
-127-12	IFT ₂	" (Secondary)	-036-12	C ₂₋₂	"
1-502-164-11	SP	Speaker	1-101-072-14	C ₃	0.01μF Ceramic
1-507-160-11	J	Jack, Earphone	-140-14	C ₄	0.005μF "
1-514-278-11	SW	Switch, Power ON-OFF		C ₅	(Built-in IFT ₁)
1-528-030-11	Batt	Battery, Nickel Cadmium 2.5V		C ₆	(Built-in IFT ₂)
	X ₁	Transistor, 2SC403	1-131-049-11	C ₇	1μF 3V Tantal
	X ₂	" 2SD64	1-101-125-15	C ₈	0.001μF Ceramic
	X ₃	" 2SB262	-073-11	C ₉	0.02μF "
	I. C.	Integrated Circuit, CX-901	-125-15	C ₁₀	0.001μF "
		Resistor	1-131-051-11	C ₁₁	30μF 3V Tantal
1-208-091-11	R ₁	270KΩ 1/10W Composition	1-127-019-11	C ₁₂	0.1μF 10V Alox
-033-11	R ₂	1KΩ " "	1-101-073-14	C ₁₃	0.02μF Ceramic
-073-11	*R ₃	47KΩ " "	1-127-018-11	C ₁₄	0.047μF Alox
-056-11	*R ₄	9.1KΩ " "	-053-11	C ₁₅	1μF 3V "
-025-11	R ₅	470Ω " "	-053-11	C ₁₆	1μF 3V "
1-221-836-11	R ₆	5KΩ Volume Control	1-131-052-11	C ₁₇	100μF 3V Tantal
1-208-009-11	R ₇	100Ω 1/10W Composition	1-101-125-15	C ₁₈	0.001μF Ceramic
-057-11	*R ₈	10KΩ " "	1-127-019-11	C ₁₉	0.1μF 10V Alox
-085-11	*R ₉	150KΩ " "	1-131-049-11	C ₂₀	1μF 3V Tantal
-031-11	R ₁₀	820Ω " "	1-101-125-15	C ₂₁	0.001μF Ceramic
-071-11	R ₁₁	39KΩ " "			
-050-11	R ₁₂	5.1KΩ " "			

* To be adjusted

(BC-100)

Part No.	Symbol	Description	Part No.	Symbol	Description
7-197-358-0	D	Diode 1S358	1-209-176-21	R ₁	12KΩ 1W Carbon
1-519-017-11	NE	Neon Lamp	1-242-699-11	R ₂	12KΩ 3/4W "
			1-244-524-11	R ₃	150KΩ 3/8W "

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