

RAPID CHARGER

KSC-32

SERVICE MANUAL

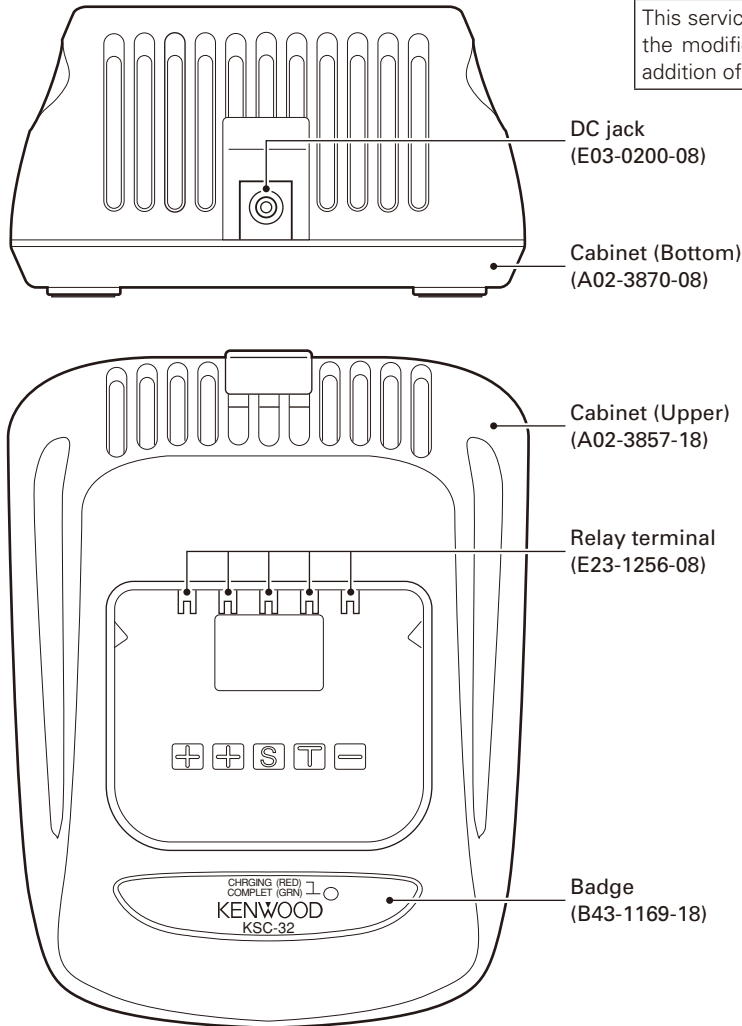
REVISED II

KENWOOD

Kenwood Corporation

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This service manual has been revised due to the modification of the AC adapter and the addition of type X.



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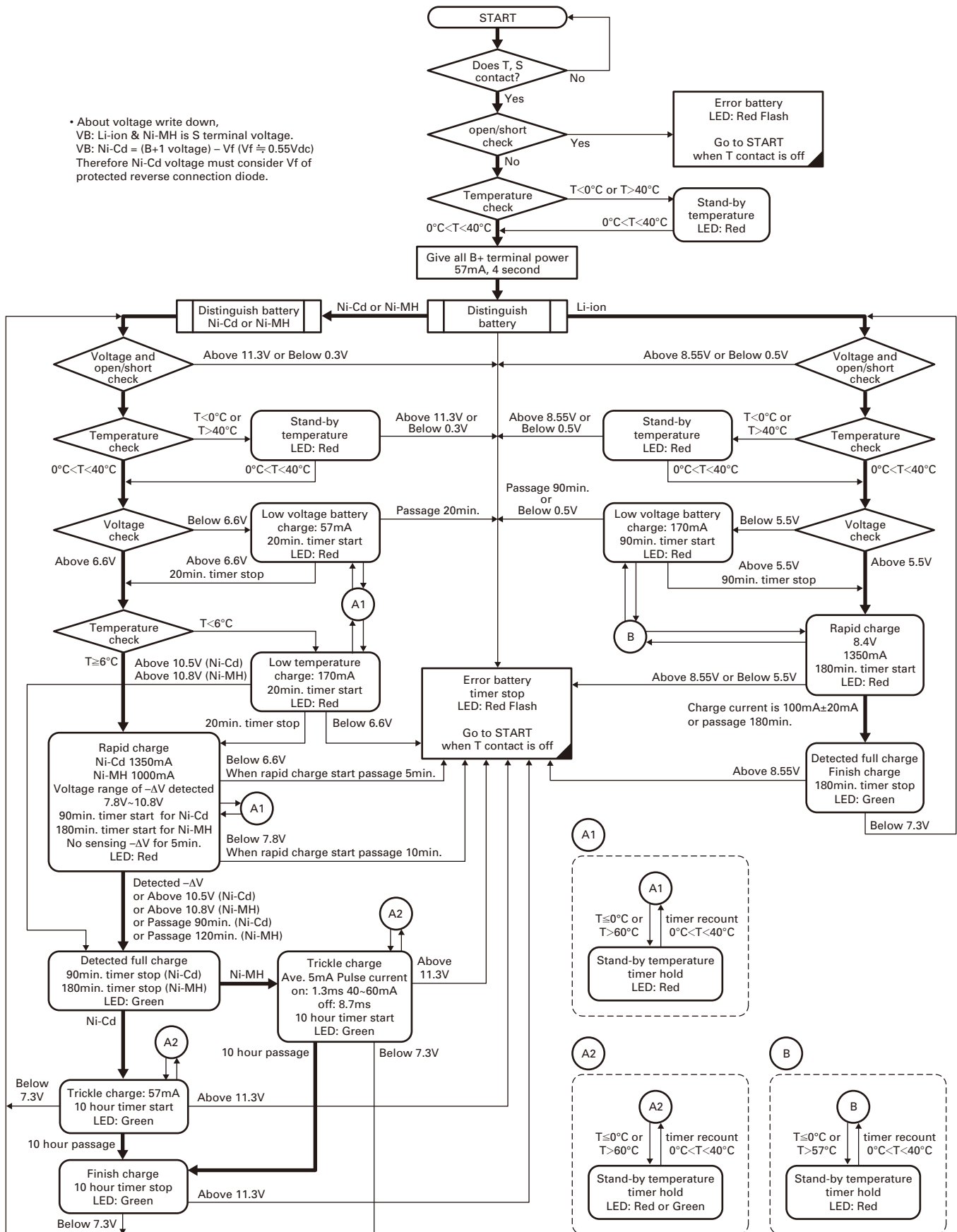
PARTS LIST

* : New Parts

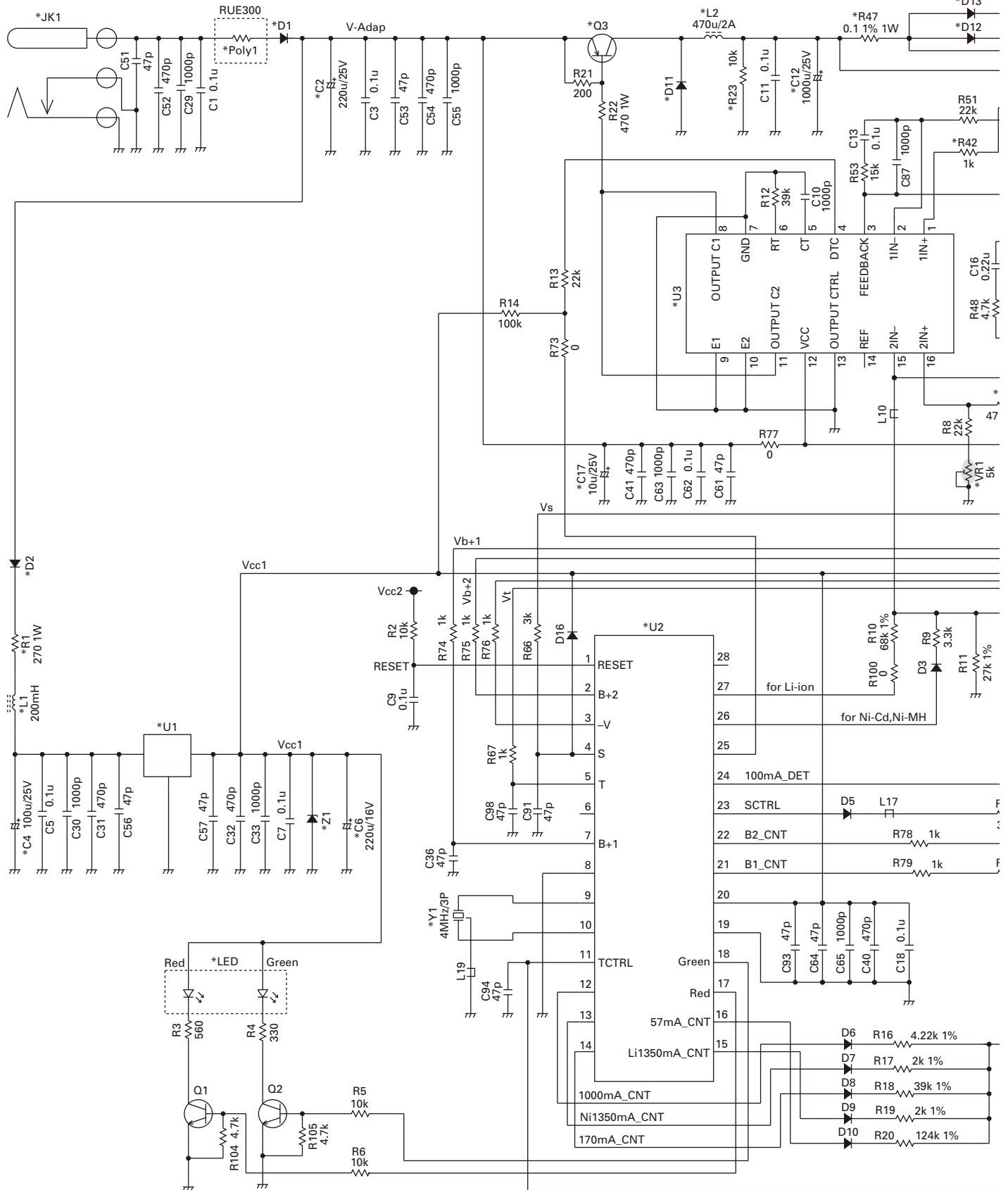
Ref. No.	Address	New parts	Parts No.	Description	Destination
KSC-32					
			A02-3857-18	CABINET(UPPER)	
			A02-3870-08	CABINET(BOTTOM)	
			B43-1169-18	BADGE	
			E03-0200-08	DC JACK	
			E23-1256-08	RELAY TERMINAL	
		*	N80-2610-43	SCREW	
			W02-3668-28	CHARGER UNIT	
		*	W08-0977-25	AC ADAPTER	T
		*	W08-0978-35	AC ADAPTER	E
		*	W08-1041-08	AC ADAPTER	K
		*	W08-1082-08	AC ADAPTER	X

FLOW CHART

• About voltage write down,
 VB: Li-ion & Ni-MH is S terminal voltage.
 VB: Ni-Cd = (B+1 voltage) - Vf (Vf ≈ 0.55Vdc)
 Therefore Ni-Cd voltage must consider Vf of
 protected reverse connection diode.



SCHEMATIC DIAGRAM



“*” Marks are lead wire parts

VR1 (RC 655MC 5K) : Adjust Li-ion 8.4V

VR2 (RC 655MC 3K) : Adjust 57mA at Ni-Cd Trickle 10.80V

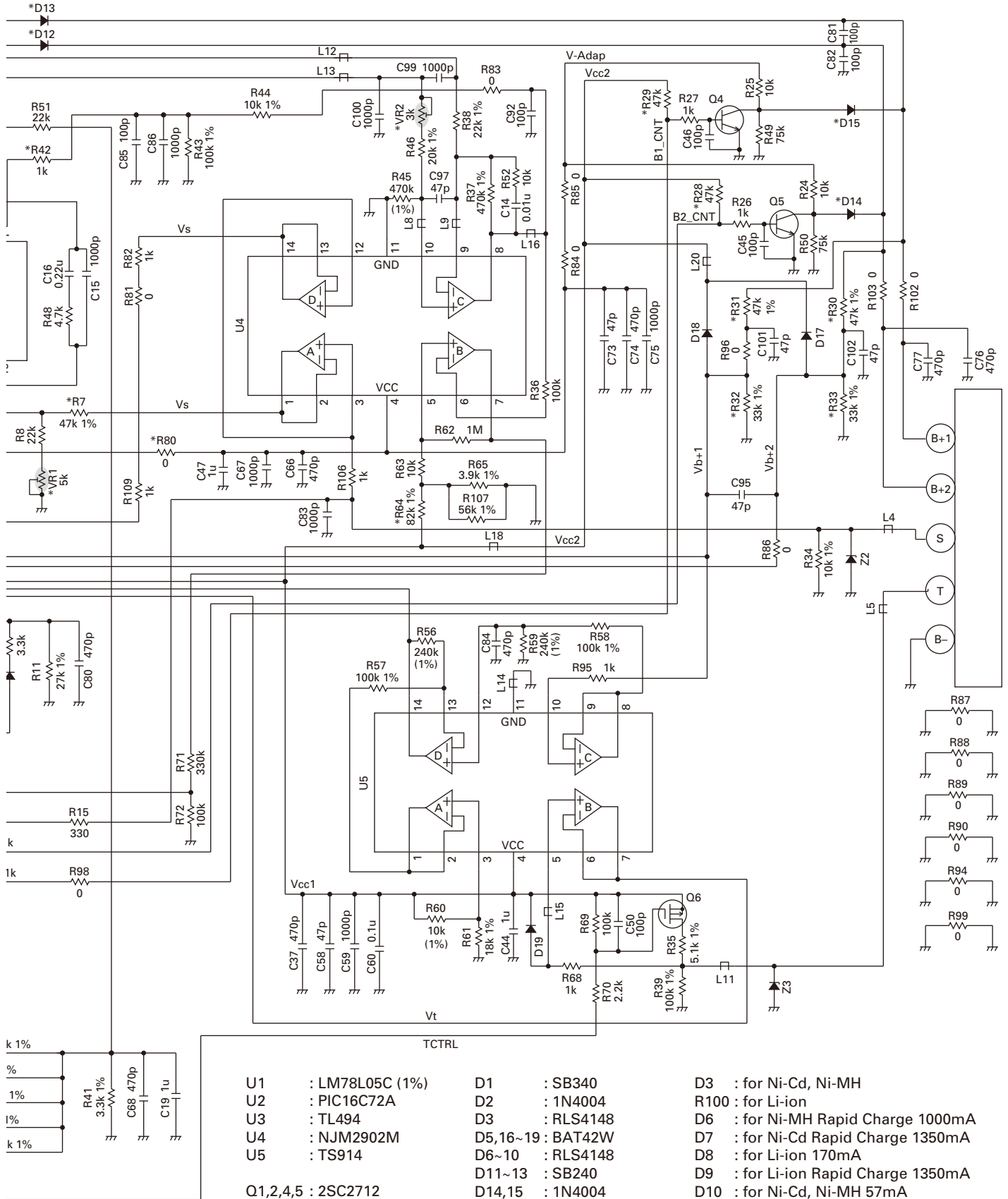
L1 : CHOKE 200mH

L2 : CHOKE 470uH/2A

L4,5,8-13,15-17,20 : BEADS 600Ω (SBK160808T-601Y-S)

L14,18,19 : BEADS 600Ω (SBK201209T-601Y-S)

SCHEMATIC DIAGRAM



U1 : LM78L05C (1%)
 U2 : PIC16C72A
 U3 : TL494
 U4 : NJM2902M
 U5 : TS914

Q1,2,4,5 : 2SC2712
 Q3 : 2SA1469
 Q6 : IRLML6302

D1 : SB340
 D2 : 1N4004
 D3 : RLS4148
 D5,16-19 : BAT42W
 D6-10 : RLS4148
 D11~13 : SB240
 D14,15 : 1N4004

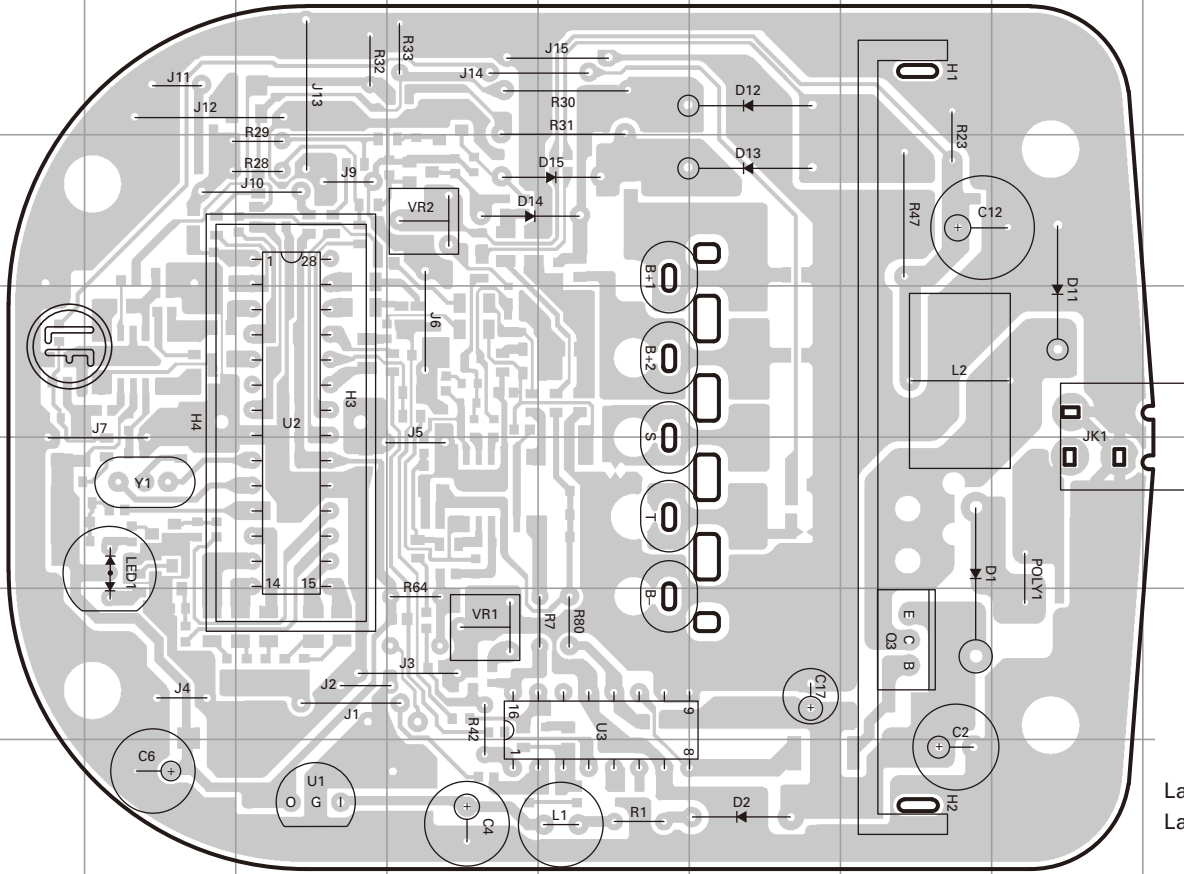
Z1 : PTZ5.6B/1W
 Z2,3 : MMSZ5246BS

LED : M059AGW-A-K

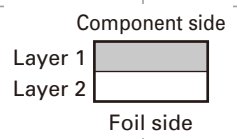
D3 : for Ni-Cd, Ni-MH
 R100 : for Li-ion
 D6 : for Ni-MH Rapid Charge 1000mA
 D7 : for Ni-Cd Rapid Charge 1350mA
 D8 : for Li-ion 170mA
 D9 : for Li-ion Rapid Charge 1350mA
 D10 : for Ni-Cd, Ni-MH 57mA
 (Low Voltage, Trickle, Pulse)

KSC-32 PC BOARD

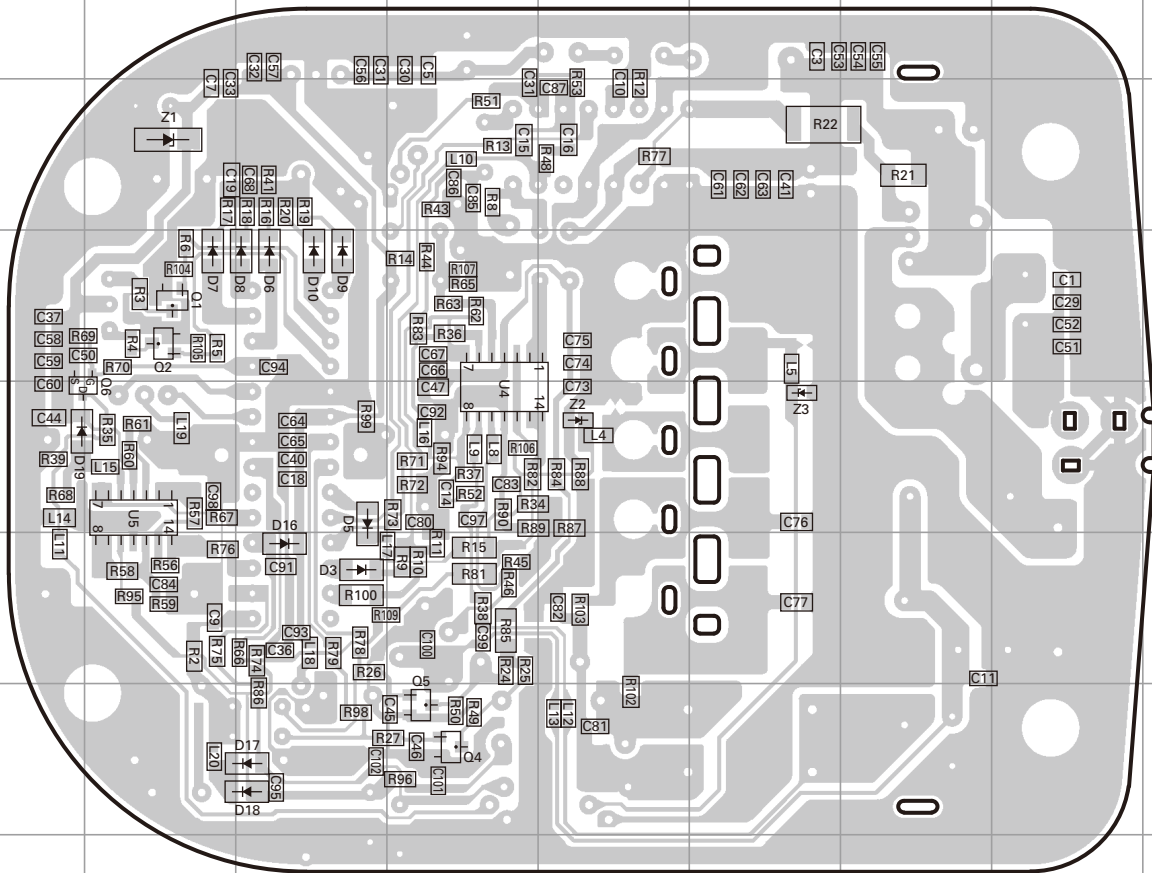
CHARGER UNIT (W02-3668-28) Component side view



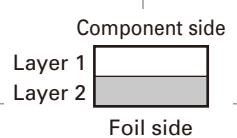
Ref. No.	Address
U1	7C
U2	4C
U3	6E
Q3	6G
D1	5G
D2	7F
D11	4H
D12	2F
D13	3F
D14	3D
D15	3E
LED1	5B



CHARGER UNIT (W02-3668-28) Foil side view



Ref. No.	Address
U4	11D
U5	11B
Q1	10B
Q2	10B
Q4	13D
Q5	13D
Q6	11A
D3	12C
D5	11C
D6	10C
D7	10B
D8	10C
D9	10C
D10	10C
D16	12C
D17	13C
D18	13C
D19	11A
Z1	9B
Z2	11E
Z3	11F



SPECIFICATIONS

AC Voltage	100~240V
Dimensions (W x H x D)	102 x 56.4 x 131.5 mm
	4-1/32 x 2-15/64 x 5-3/16 inches
Weight (charger only)	Approx. 190g / 0.42 lbs
Approximate Charging Times	
KNB-31A (Ni-Cd: 7.2V)	80 minutes
KNB-32N (Ni-MH: 7.2V).....	170 minutes
KNB-33L (Li-ion: 7.4V).....	140 minutes
KNB-41NC (Ni-MH: 7.2V)	170 minutes
KNB-47L (Li-ion: 7.4V).....	140 minutes
KNB-48L (Li-ion: 7.4V).....	170 minutes
KNB-50NC (Ni-MH: 7.2V)	140 minutes

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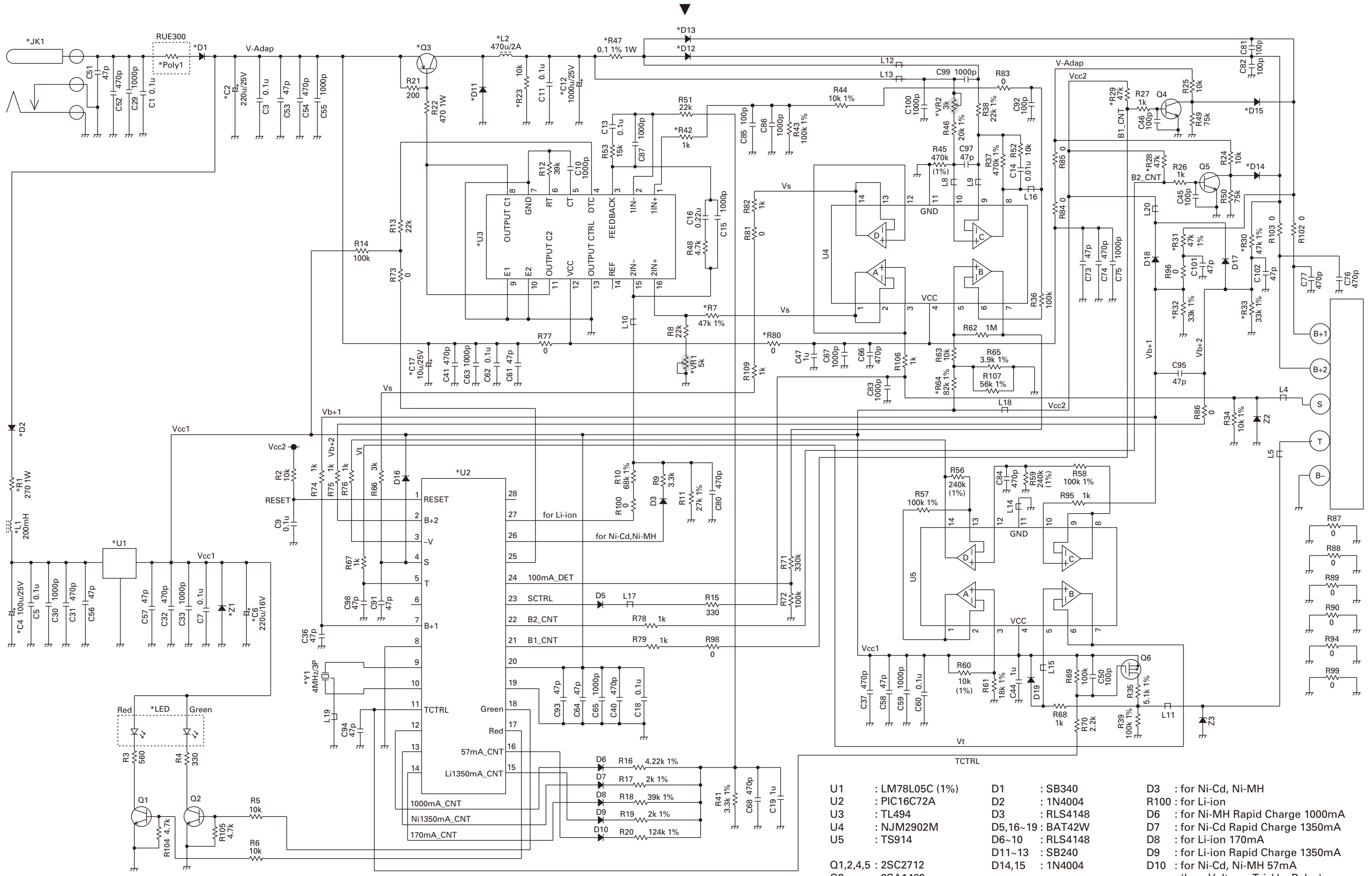
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- | | | |
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| Q6 : IRLML6302 | LED : M059AGW-A-K | |