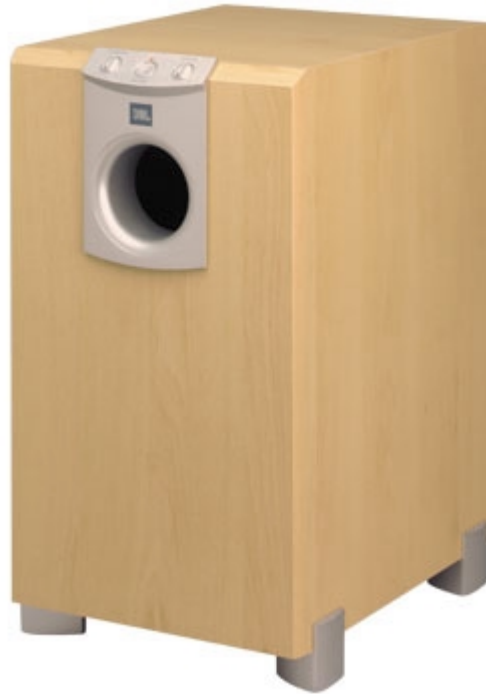


SIMPLY CINEMA - SCS 138-178 Subwoofer

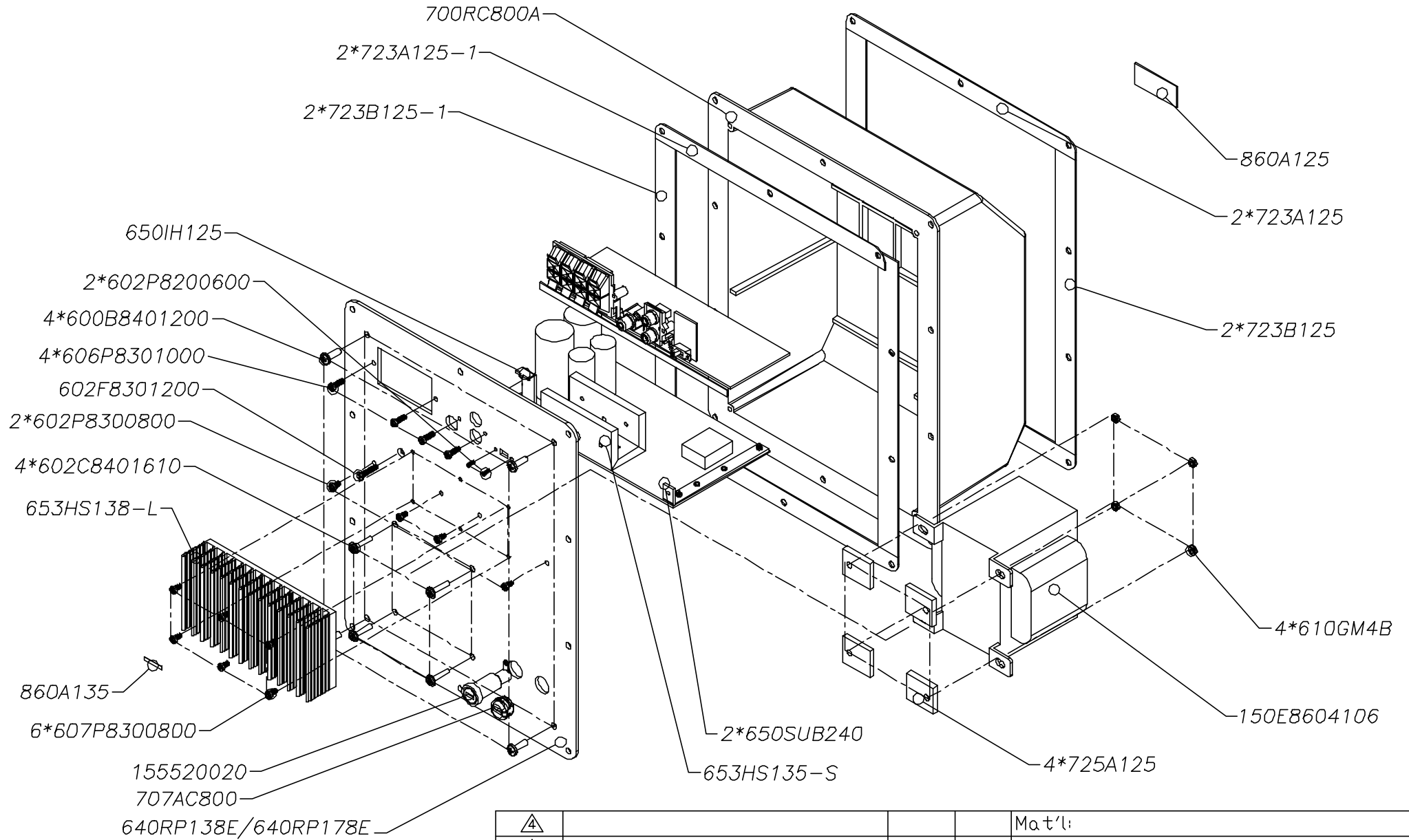
Service manual V2 (CE)



SPECIFICATIONS:

Active Subwoofer Section

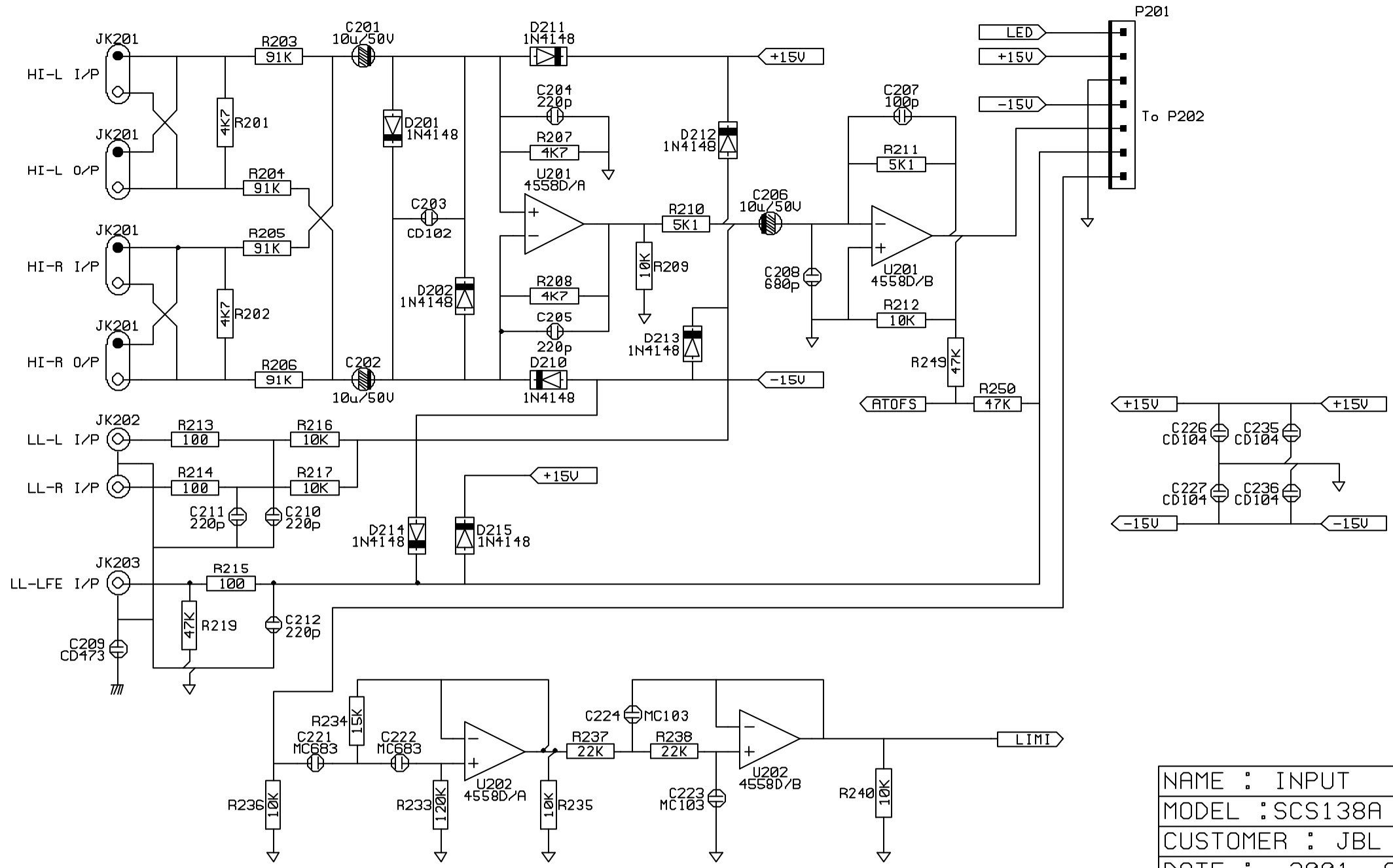
- **Low Frequency Cut-off: 35Hz**
 - **High Frequency Cut-off: 40Hz - 120Hz Variable**
 - **Built-In Amplifier Power: 100 Watts RMS**
 - **Drive Units: 200mm Paper Cone Long Throw Driver**
- ### **Bass Reflex Enclosure**
- **Dimensions (H x W x D): 450mm x 250mm x 360 mm**
 - **Weight: 13.6kg**



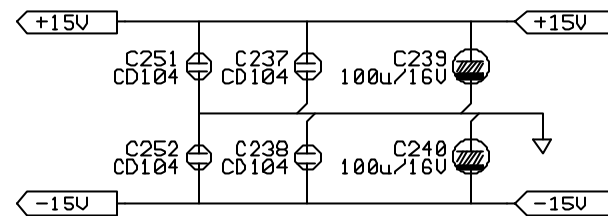
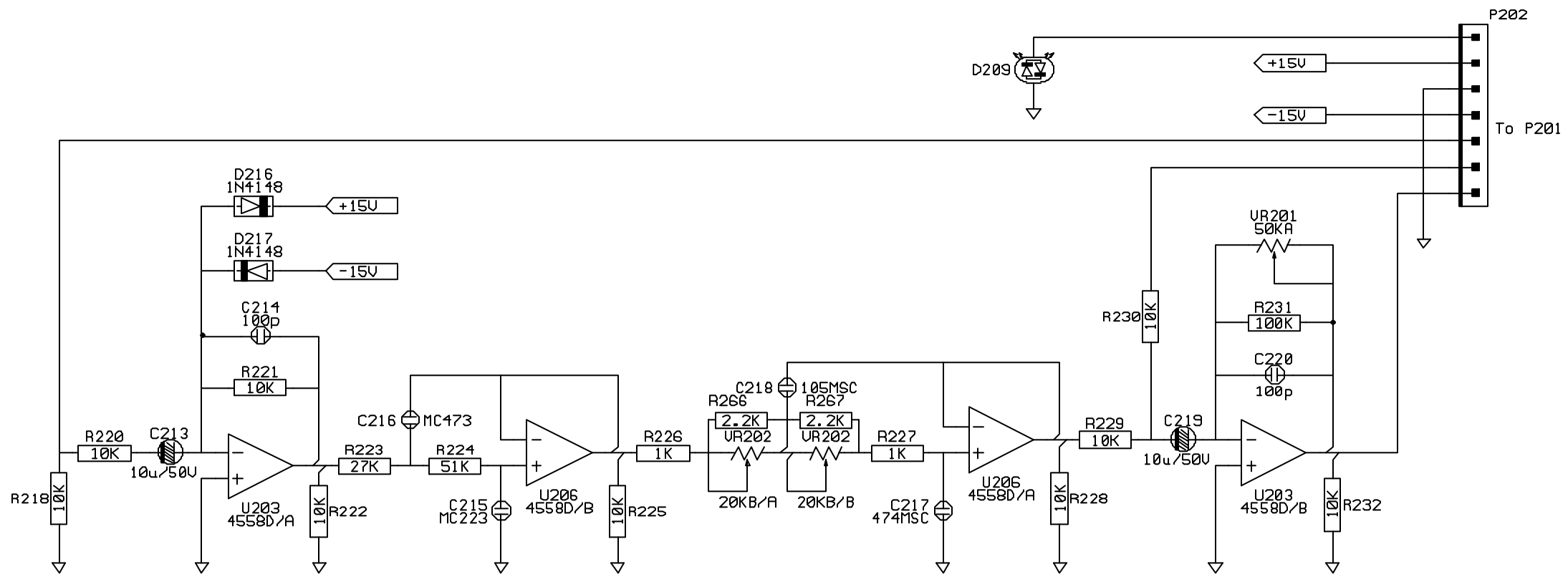
| | | | | |
|--|-----------|------|------|----------------------------------|
| △ | | | | Mat'l: |
| △ | | | | FINISH(COLOR): |
| △ | | | | SCALE: 1:1 UNIT: |
| | | | | DATE: 2001-8-02 M.M. 3rd Angle |
| ISSUE | REVISIONS | DATE | NAME | TITLE \M+2C37A\M+2ACB5\M+2B9CF |
| MEILUON INDUSTRIAL CO., LTD. TEL: 0769 7911366 | | | | PART No.: 106SUB138E//106SUB178E |

| | | | |
|-------------|--------------------------|--------|--------------------------|
| DRAW. | \M+2A973\M+2B077\M+2A075 | DSJ | AP.D. |
| SCALE PLOT: | FREE | MAKER: | \M+2A8D1\M+2C0B3\M+2B0D3 |

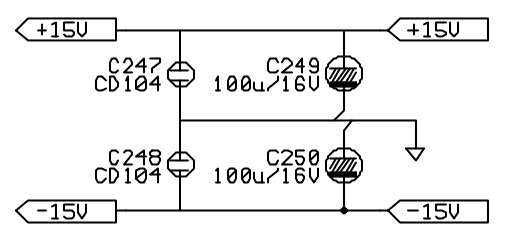
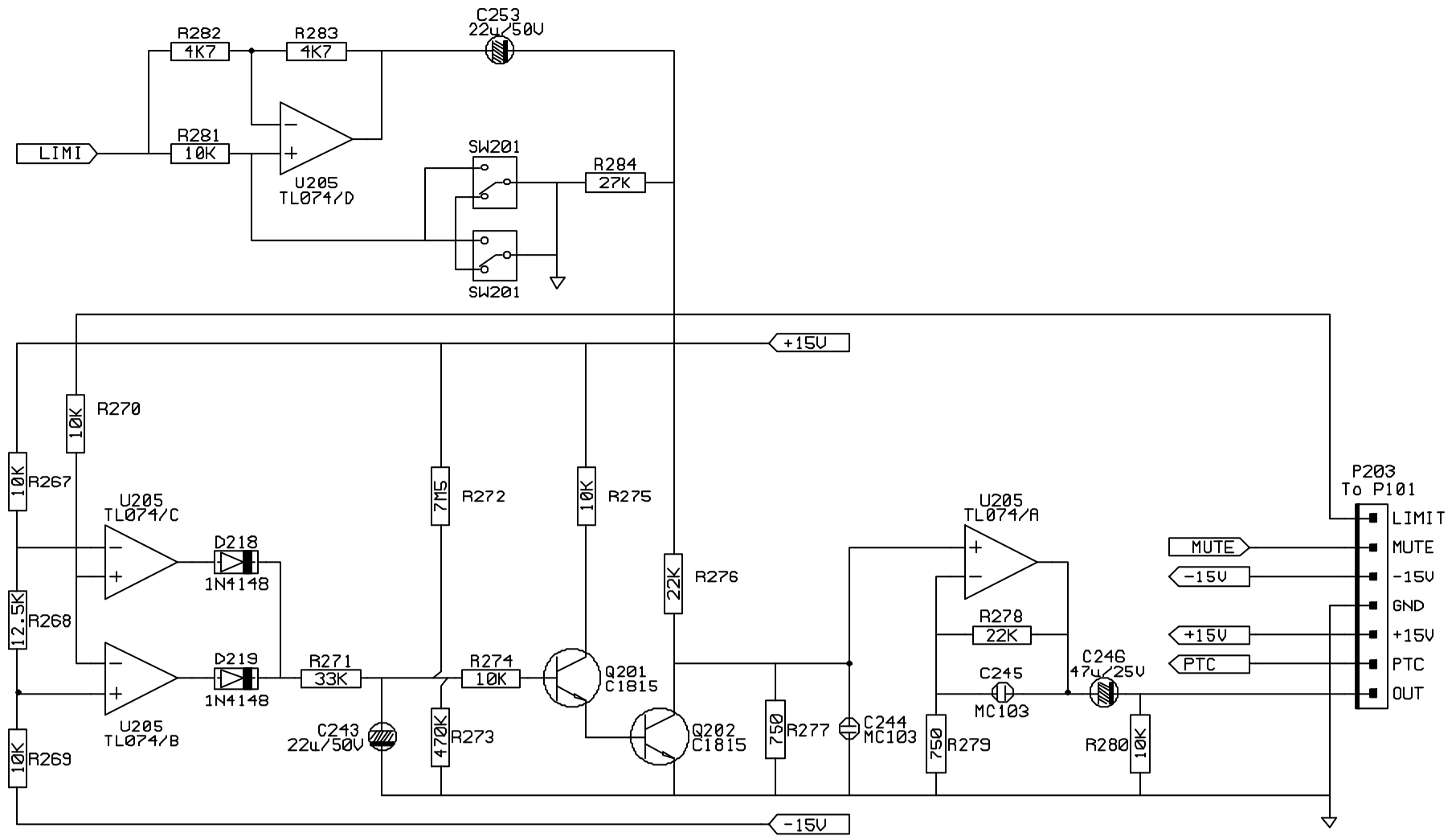
| Part list for exploded view SCS138-178 | | |
|--|--|----------|
| material No | material description | quantity |
| 1010SUB138CE | PCB ASS'Y AMP | 1 |
| 1010SUB138E01 | PCB AMP ASS'Y | 1 |
| 1302g472md00 | capacitor | 1 |
| 150e8604106 | transformer | 1 |
| 152v60202601 | power cable SP=021B 6FT VDE | 1 |
| 154v12506t0 | fuse TSD 1.25A 250v VDE | 1 |
| 155520020 | fuse bracket R3-11 | 1 |
| 156h040015 | shrinkable tube 1*20mm | 2 |
| 156h040015 | shrinkable tube 4*15mm | 2 |
| 156h100040 | shrinkable tube 10*40mm | 1 |
| 16250502005 | 2 pin 500mm red\black awg18 t187 t110*0.8t | 1 |
| 162a0900002 | wires | 1 |
| 16311009 | plastic binding wire transparent 100mm | 3 |
| 176wjcel | closed edge terminal | 2 |
| 180psdd1d1 | power switch SDDL1-A1-D-! | 1 |
| 1932m1813 | piezo sheet To-220 18*13mm | 2 |
| 600b8401200 | wood screw | 4 |
| 602c8401610 | mechanic screw | 4 |
| 602f8301200 | mechanic screw | 1 |
| 602p8200600 | mechanic screw | 2 |
| 602p8300800 | mechanic screw | 8 |
| 606p8301000 | P type self screw | 6 |
| 607p8300600 | B type self screw | 2 |
| 607p8300800 | B type self screw | 8 |
| 610gm4b | M4 nut | 4 |
| 640rp138e-1 | aluminum plate 215*270*2.5t | 1 |
| 644a138 | aluminum foil 95*50*t0.2 | 1 |
| 644b138 | aluminum foil 135*25*0.2 | 1 |
| 650ih125 | IC holder | 1 |
| 650sh138 | switch bracket 72*21.5*T1.2mm | 1 |
| 650sub240 | PCB bracket L type t=1.6mm S.P.C.C | 2 |
| 653hs138-1 | heat sink 117.5*60*25 anodization white | 1 |
| 700fp138 | plastic porttube parts | 1 |
| 700pb138 | power key | 1 |
| 700rc138 | rear housing 268*213*102 A.B.S UL | 1 |
| 700vk138 | volume key | 2 |
| 7075p-4 | power cable knob 5P-4 | 1 |
| 707ac800 | power cable knob 4K-4 NO-BB | 2 |
| 723a125 | EVA gasket width 213*153*2.0mm | 2 |
| 723a125-1 | EVA gasket width 213*15*1.0t | 2.333 |
| 723a138 | EVA | 1 |
| 723b125 | EVA gasket length 238*15*2.0mm | 2 |
| 723b125-1 | EVA gasket length 238*15*1.0t | 2 |
| 723d125 | EVA gasket 170*5*1t | 1 |
| 723j125 | gasket EVA length 225*15*1t UL | 1 |
| 725a125 | rubber gasket 25*21*4t | 4 |
| 860a125 | sticker "4 ohm speaker" | 1 |
| 860a135 | sticker "made in China" | 1 |



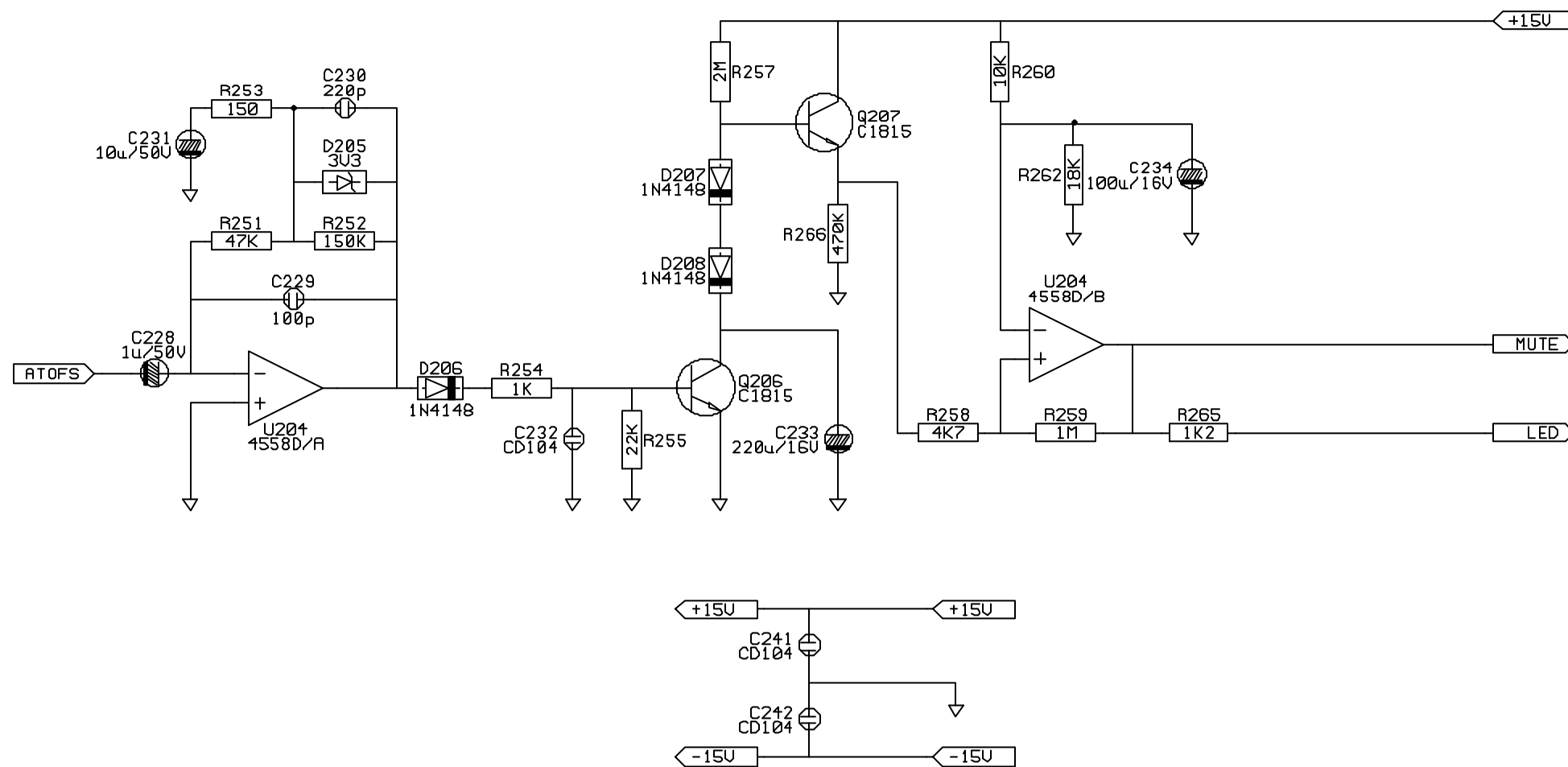
| | |
|-------------------|---------------------|
| NAME : INPUT | 1/4 |
| MODEL : SCS138A | REV: A |
| CUSTOMER : JBL | |
| DATE : 2001- 9-27 | |
| APPROVE BY | CHECK BY DRAWING BY |
| | |



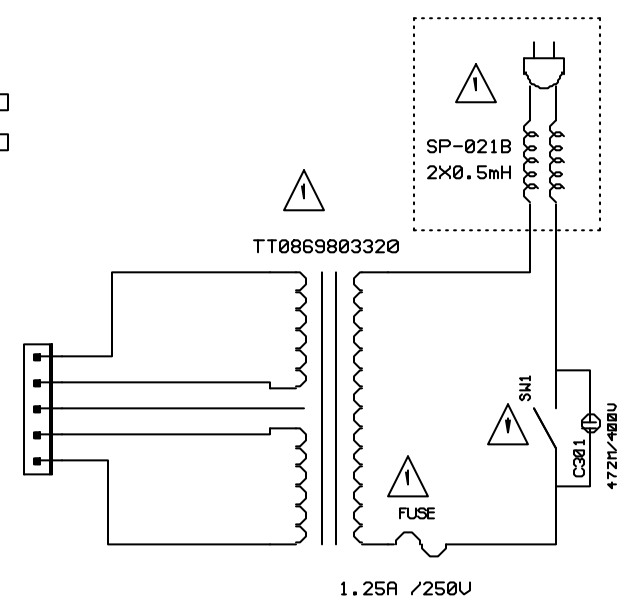
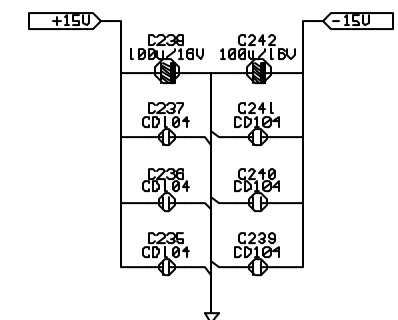
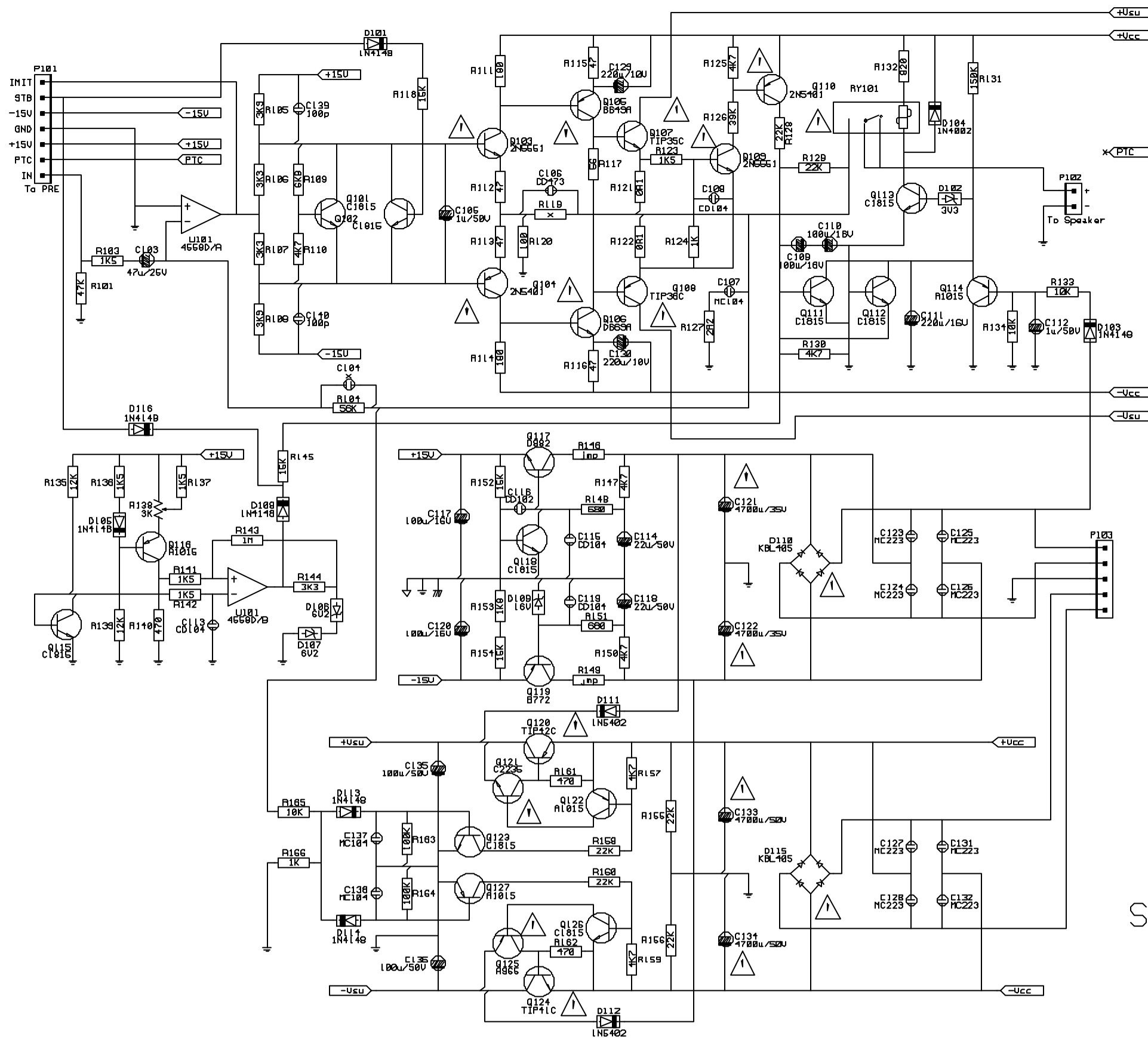
| | | |
|--------------------|----------|------------|
| NAME :: Control | | 3/4 |
| MODELL :: SCS138A | | RELU: A |
| CUSTOMER :: JBL | | |
| DATE :: 2001- 9-27 | | |
| APPROVE BY | CHECK BY | DRAWING BY |
| | | |



| | | |
|-------------------|----------|------------|
| NAME : Limiter | | 4/4 |
| MODEL : SCS138A | | REV: A |
| CUSTOMER : JBL | | |
| DATE : 2001- 9-27 | | |
| APPROVE BY | CHECK BY | DRAWING BY |
| | | |



| | |
|---------------------|----------|
| NAME :Auto ON/OFF | 2 / 4 |
| MODEL :SCS138A | REV:A |
| CUSTOMER : JBL | |
| DATE : 2001 - 9 -27 | |
| APPROVE BY | CHECK BY |
| | |
| DRAWING BY | |
| | |



SCS178.SCH
 SCS138 . SCH
 SEP-30-2001

**Part list for
SCS 138-178 V2
/106SUB138CE**

| | PART NO. | DESCRIPTION | QTY | REFERENCE |
|----|-----------------|----------------------------|------------|--|
| 1 | 1010SUB138CE | PCB ASS'Y AMP | 1 | |
| 2 | 101ASUB138CE | AI PCB ASS'Y AMP OF SUB138 | 1 | |
| 3 | 104sub138e00 | PCB OF SUB138CE | 1 | |
| 4 | 11014122j26 | Resistor 1.2K 1/4W ±5% CF | 1 | R265 |
| 5 | 11014472j26 | Resistor 4.7K 1/4W ±5% CF | 2 | R201,2 |
| 6 | 11014560j26 | Resistor 56 1/4W ±5% CF | 1 | R117 |
| 7 | 11016101j26 | Resistor 100 1/6W ±5% CF | 4 | R120,213,4,5 |
| 8 | 11016102j26 | Resistor1K 1/6W ±5% CF | 3 | R124,66,254 |
| 9 | 11016103j26 | Resistor 10K 1/6W ±5% CF | 17 | R133,4,209,12,6,7,235 .6.40.60.7.9.4.5.80.1 |
| 10 | 11016104j26 | Resistor100K 1/6W ±5% CF | 2 | R163,4 |
| 11 | 11016105j26 | Resistor1M 1/6W ±5% CF | 2 | R143,259 |
| 12 | 11016123j26 | Resistor 12K 1/6W ±5% CF | 3 | R135,9,65 |
| 13 | 11016124j26 | Resistor 120K 1/6W ±5% CF | 1 | R233 |
| 14 | 11016151j26 | Resistor 150 1/6W ±5% CF | 1 | R253 |
| 15 | 11016152j26 | Resistor 1.5K 1/6W ±5% CF | 7 | R103,23,36,7,41,2,53 |
| 16 | 11016153j26 | Resistor15K 1/6W ±5% CF | 5 | R118,45,52,4,234 |
| 17 | 11016154j26 | Resistor 150K 1/6W ±5% CF | 2 | R131,252 |
| 18 | 11016181j26 | Resistor180 1/6W ±5% CF | 2 | R111,4 |
| 19 | 11016205j26 | Resistor2.0M 1/6W ±5% CF | 1 | R257 |
| 20 | 11016223j26 | Resistor22K 1/6W ±5% CF | 12 | R128,9,55,6,8,60,237 .8,55.62,76,8 |
| 21 | 11016273j26 | Resistor27K 1/6W ±5% CF | 1 | R284 |
| 22 | 11016332j26 | Resistor 3.3K 1/6W ±5% CF | 3 | R106,7,44 |
| 23 | 11016333j26 | Resistor 33K 1/6W ±5% CF | 1 | R271 |
| 24 | 11016392j26 | Resistor 3.9K 1/6W ±5% CF | 2 | R105,8 |

| | | | | |
|----|--------------|--|----|--|
| 25 | 11016393j26 | Resistor39K 1/6W ±5% CF | 1 | R126 |
| 26 | 11016470j26 | Resistor47 1/6W ±5% CF | 4 | R112,3,5,6 |
| 27 | 11016471j26 | Resistor470 1/6W ±5% CF | 3 | R140,61,2 |
| 28 | 11016472j26 | Resistor 4.7K 1/6W ±5% CF | 12 | R110,25,30,47,50,7,9 .207,8,58,82,3 |
| 29 | 11016473j26 | Resistor47K 1/6W ±5% CF | 5 | R101,219,49,50,1 |
| 30 | 11016474j26 | Resistor 470K 1/6W ±5% CF | 2 | R266,73 |
| 31 | 11016512j26 | Resistor 5.1K 1/6W ±5% CF | 2 | R210,1 |
| 32 | 11016563j26 | Resistor 56K 1/6W ±5% CF | 1 | R104 |
| 33 | 11016681j26 | Resistor680 1/6W ±5% CF | 2 | R148,51 |
| 34 | 11016682j26 | Resistor6.8K 1/6W ±5% CF | 1 | R109 |
| 35 | 11016751j26 | Resistor750 1/6W ±5% CF | 2 | R277,9 |
| 36 | 11016755j26 | Resistor 7.5M 1/6W ±5% CF | 1 | R272 |
| 37 | 11016913j26 | Resistor 91K 1/6W ±5% CF | 4 | R203,4,5,6 |
| 38 | 116161252f26 | Resistor 12.5K 1/6W ±1% MF | 1 | R268 |
| 39 | 1302b101k503 | Disc Capacitor 100P 50V ±10% | 3 | C139,40,207 |
| 40 | 1302b102k503 | Disc Capacitor 1000P 50V ±10% | 3 | C116,41,203 |
| 41 | 1302b221k503 | Disc Capacitor 220P 50V ±10% | 6 | C204,5,10,1,2,30 |
| 42 | 1302b681k503 | Disc Capacitor 680P 50V ±10% | 1 | C208 |
| 43 | 1302f104z503 | Disc Capacitor 0.1U 50V +80/-20% | 15 | C108,13,5,9,37,8,226 .7,32,5,6,41,2,7,8 |
| 44 | 1303f473m503 | Disc Capacitor 0.047U 50V ±20% | 2 | C106,209 |
| 45 | 130sl470k503 | Disc Capacitor 47P 50V +350/-1000 ±10% | 1 | C229 |
| 46 | 132103j503 | Mylar Capacitor 0.01U 50V ±5% | 4 | C223,4,44,5 |
| 47 | 132104j503 | Mylar Capacitor 0.1U 50V ±5% | 3 | C107,221,2 |
| 48 | 132223ja03 | Mylar Capacitor 0.022uF 100V ±5% | 8 | C123,4,5,6,7,8,31,2 |
| 49 | 1353105m50 | Electrolytic Cap. 1U 50V ±20% | 3 | C105,12,228 |
| 50 | 1353106m50 | Electrolytic Cap. 10U 50V ±20% | 4 | C201,2,6,31 |
| 51 | 1353107m16 | Electrolytic Cap. 100uF 16V ±20% | 7 | C109,10,17,20,234 .49,50 |
| 52 | 1353107m50 | Electrolytic Cap. 100U 50V ±20% | 1 | C136 |
| 53 | 1353226m50 | Electrolytic Cap. 22U 50V ±20% | 5 | C114,8,225,43,53 |

| | | | | |
|----|---------------|----------------------------------|----|--|
| 54 | 1353227m10 | Electrolytic Cap. 220U 10V ±20% | 2 | C129,30 |
| 55 | 1353227m16 | Electrolytic Cap. 220U 16V ±20% | 1 | C111 |
| 56 | 1353336m16 | Electrolytic Cap. 33U 16V ±20% | 1 | C233 |
| 57 | 1353476m25 | Electrolytic Cap. 47U 25V ±20% | 2 | C103,246 |
| 58 | 192027c1815gr | Transistor 2SC1815GR | 11 | Q102,11,2,3,8,23 .6,201,2,6,7 |
| 59 | 192027c2235y | Transistor 2SC2235Y | 1 | Q121 |
| 60 | 192028a1015gr | Transistor 2SA1015GR | 3 | Q114,6,27 |
| 61 | 192028a965y | Transistor 2SA965Y | 1 | Q125 |
| 62 | 1921672n5551 | Transistor 2N5551 | 2 | Q103,9 |
| 63 | 1921682n5401 | Transistor 2N5401 AI-PNP | 2 | Q104,10 |
| 64 | 197131n4148 | Diode 1N4148 | 20 | D101,3,5,8,13,4,6,201 .2,6,7,8,10,1,2,3,4,5,8,9 |
| 65 | 19915000335 | Zener Diode 3.3V 1/2W | 2 | D102,205 |
| 66 | 19915000625 | Zener Diode 6.2V 1/2W | 2 | D106,7 |
| 67 | 19915001605 | Zener Diode 16V 1/2W | 1 | D109 |
| 68 | 11010821jk1 | Resistor 820 1W ±5% | 1 | R132 |
| 69 | 110122r2j15 | Resistor 2.2 1/2W ±5% | 1 | R127 |
| 70 | 11016472j26 | Resistor 4.7K 1/6W ±5% CF | 1 | R157 |
| 71 | 113500r1j10 | Cement Resistor 0.1 5W | 2 | R121,2 |
| 72 | 11403302m0 | Semi-fixed Resistor 3K 0.3W ±20% | 1 | R138 |
| 73 | 1353107m50 | Electrolytic Cap. 100U 50V ±20% | 1 | C135 |
| 74 | 1354478m35 | Electrolytic Cap. 4700U 35V ±20% | 2 | C121,2 |
| 75 | 1354478m50 | Electrolytic Cap. 4700U 50V ±20% | 2 | C133,4 |
| 76 | 171udhss124d | Relay 5A 24V UDH-SS124D | 1 | RY101 |
| 77 | 1740rcb202v | RCA JACK RCB-202V | 1 | JK202 |
| 78 | 1740rcb242v1 | JACK RCA RCB-242V-1 | 1 | JK203 |
| 79 | 1742rsp108v | 8 PIN SPK JACK RSP-108V | 1 | JK201 |
| 80 | 180tms7210v | SWITCH SLIDE 6PIN MS7210V | 1 | SW201 |
| 81 | 19006m4558d | I.C. OPA 4558D | 4 | U101,201,2,4 |
| 82 | 19016tl074cn | I.C. TL074CN ST | 1 | U205 |

| | | | | |
|-----|---------------|---------------------------------------|---|-------------------------|
| 83 | 192021c1815gr | Transistor 2SC1815GR | 2 | Q101,15 |
| 84 | 192021tip35c | Transistor TIP35C | 1 | Q107 |
| 85 | 192022tip36c | Transistor TIP36C | 1 | Q108 |
| 86 | 192028a1015gr | Transistor 2SA1015GR | 1 | Q122 |
| 87 | 192161tip41c | Transistor TIP41C NPN SGS | 1 | Q001 |
| 88 | 192162tip42c | Transistor TIP42C PNP SGS | 1 | Q120 |
| 89 | 192201d882y | Transistor KSD882Y | 1 | Q117 |
| 90 | 192202b772y | Transistor KSB772Y | 1 | Q119 |
| 91 | 192991d669a | Transistor HSD669A | 1 | Q106 |
| 92 | 192992b649a | Transistor HSB649A | 1 | Q105 |
| 93 | 19700kbl405 | Diode 4A 500V KBL405 | 2 | D110,5 |
| 94 | 197101n4002 | Diode 1N4002 | 1 | D104 |
| 95 | 197101n5402 | Diode 1N5402 | 2 | D111,2 |
| 96 | 101OSUB138E01 | PCB AMP ASS'Y | 1 | |
| 97 | 101ASUB138E01 | AI PCB ASS'Y | 1 | |
| 98 | 104sub138e01 | PCB | 1 | |
| 99 | 11016102j26 | Resistor1K 1/6W \pm 5% CF | 2 | R226,7 |
| 100 | 11016103j26 | Resistor 10K 1/6W \pm 5% CF | 9 | R218,20,1,2,25,8,9,30,2 |
| 101 | 11016104j26 | Resistor100K 1/6W \pm 5% CF | 1 | R231 |
| 102 | 11016222j26 | Resistor2.2K 1/6W \pm 5% CF | 2 | R266,7 |
| 103 | 11016273j26 | Resistor27K 1/6W \pm 5% CF | 1 | R223 |
| 104 | 11016513j26 | Resistor 51K 1/6W \pm 5% CF | 1 | R224 |
| 105 | 1302b101k503 | Disc Capacitor 100P 50V \pm 10% | 2 | C214,20 |
| 106 | 1302b102k503 | Disc Capacitor 1000P 50V \pm 10% | 2 | C1,2 |
| 107 | 1302f104z503 | Disc Capacitor 0.1U 50V +80/-20% | 4 | C237,8,51,2 |
| 108 | 132223ja03 | Mylar Capacitor 0.022uF 100V \pm 5% | 1 | C215 |
| 109 | 132473ja03 | Mylar Capacitor 0.047uF 100V \pm 5% | 1 | C216 |
| 110 | 1353106m50 | Electrolytic Cap. 10U 50V \pm 20% | 2 | C213,9 |
| 111 | 1353107m16 | Electrolytic Cap. 100uF 16V \pm 20% | 2 | C239,40 |
| 112 | 197131n4148 | Diode 1N4148 | 2 | D216,7 |

| | | | | |
|-----|--------------|-----------------------------------|---|--------|
| 113 | 115h203b206 | Variable Resistor B20K H:12.5mm | 1 | VR202 |
| 114 | 115h503a105 | Variable Resistor A50K H:12.5mm | 1 | VR201 |
| 115 | 129a105j633 | Metallize Cap. 1uF 63V ±5% | 1 | C218 |
| 116 | 129a474j633 | Metallize Cap. 0.47U 63V ±5% | 1 | C217 |
| 117 | 19006m4558d | I.C. OPA 4558D | 2 | U203,6 |
| 118 | 19510204hgw | LED 204HGW | 1 | LED1 |
| 119 | 1302g472md00 | Disc Capacitor 4700P 400V ±20% | 1 | |
| 120 | 150e8604106 | Power Transformer EI-86 230V/50Hz | 1 | |
| 121 | 152v60202601 | Line Cord SP-021B 6FT VDE | 1 | |
| 122 | 154v12506t0 | FUSE TSD 1.25A 250V VDE | 1 | |
| 123 | 155520020 | Fuse holder R3-11 | 1 | |
| 124 | 180psddld1 | Switch SDDL1-A1-D-1 | 1 | |
| | | | | |