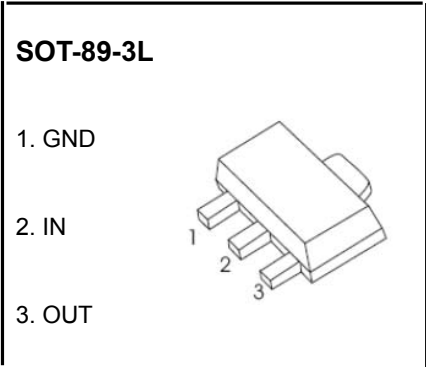


SOT-89-3L Encapsulate Three-terminal Voltage Regulator

CJ79L15 Three-terminal Negative Voltage Regulator

FEATURES

- Maximum Output current
 I_{OM} : 100 mA
- Output voltage
 V_O : -15 V
- Continuous total dissipation
 P_D : 0.5 W



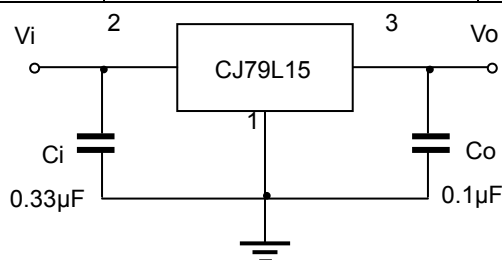
ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

| Parameter | Symbol | Value | Unit |
|--------------------------------------|-----------|----------|------|
| Input Voltage | V_i | -35 | V |
| Operating Junction Temperature Range | T_{OPR} | 0~+125 | °C |
| Storage Temperature Range | T_{STG} | -55~+150 | °C |

ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE ($V_i=-23V, I_o=40mA, C_i=0.33\mu F, C_o=0.1\mu F$, unless otherwise specified)

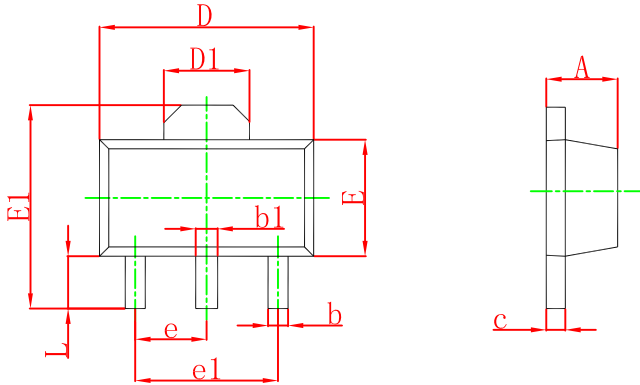
| Parameter | Symbol | Test condition | Min | Typ | Max | Unit |
|--------------------------|--------------|---|---------|-----|--------|------|
| Output voltage | V_o | 25°C | -14.4 | -15 | -15.6 | V |
| | | -17.5V ≤ V_i ≤ -30V, $I_o=1mA\sim 40mA$ | -14.25 | -15 | -15.75 | V |
| | | 0-125°C, $I_o=1mA\sim 70mA$ | -14.25 | -15 | -15.75 | V |
| Load Regulation | ΔV_o | $I_o=1mA\sim 100mA, V_i=-23V$ | 25°C | 25 | 150 | mV |
| | | $I_o=1mA\sim 40mA, V_i=-23V$ | 25°C | 15 | 75 | mV |
| Line regulation | ΔV_o | -17.5V ≤ V_i ≤ -30V, $I_o=40mA$ | 25°C | 65 | 300 | mV |
| | | -20V ≤ V_i ≤ -30V, $I_o=40mA$ | 25°C | 50 | 250 | mV |
| Quiescent Current | I_q | 25°C | | | 6.5 | mA |
| Quiescent Current Change | ΔI_q | -20V ≤ V_i ≤ -30V, $I_o=40mA$ | 0-125°C | | 1.5 | mA |
| | ΔI_q | 1mA ≤ I_o ≤ 40mA | 0-125°C | | 0.1 | mA |
| Output Noise Voltage | V_N | 10Hz ≤ f ≤ 100KHz | 25°C | 90 | | μV |
| Ripple Rejection | RR | -18.5V ≤ V_i ≤ -28.5V, f=120Hz | 0-125°C | 34 | 39 | dB |
| Dropout Voltage | V_d | 25°C | | 1.7 | | V |

TYPICAL APPLICATION



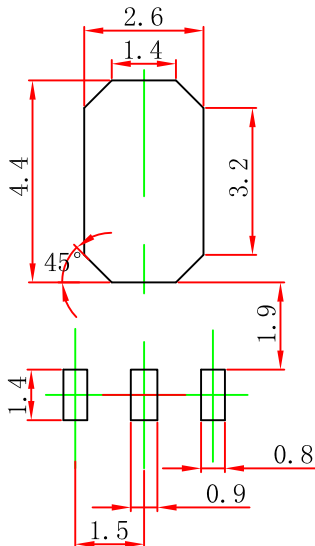
Note : Bypass capacitors are recommended for optimum stability and transient response and should be located as close as possible to the regulators.

SOT-89-3L Package Outline Dimensions



| Symbol | Dimensions In Millimeters | | Dimensions In Inches | |
|--------|---------------------------|-------|----------------------|-------|
| | Min | Max | Min | Max |
| A | 1.400 | 1.600 | 0.055 | 0.063 |
| b | 0.320 | 0.520 | 0.013 | 0.020 |
| b1 | 0.400 | 0.580 | 0.016 | 0.023 |
| c | 0.350 | 0.440 | 0.014 | 0.017 |
| D | 4.400 | 4.600 | 0.173 | 0.181 |
| D1 | 1.550 REF. | | 0.061 REF. | |
| E | 2.300 | 2.600 | 0.091 | 0.102 |
| E1 | 3.940 | 4.250 | 0.155 | 0.167 |
| e | 1.500 TYP. | | 0.060 TYP. | |
| e1 | 3.000 TYP. | | 0.118 TYP. | |
| L | 0.900 | 1.200 | 0.035 | 0.047 |

SOT-89-3L Suggested Pad Layout



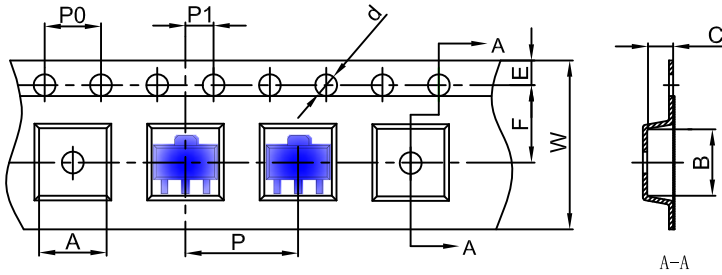
- Note:
1. Controlling dimension: in millimeters.
 2. General tolerance: ± 0.05 mm.
 3. The pad layout is for reference purposes only.

NOTICE

JCET reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. JCET does not assume any liability arising out of the application or use of any product described herein.

SOT-89-3L Tape and Reel

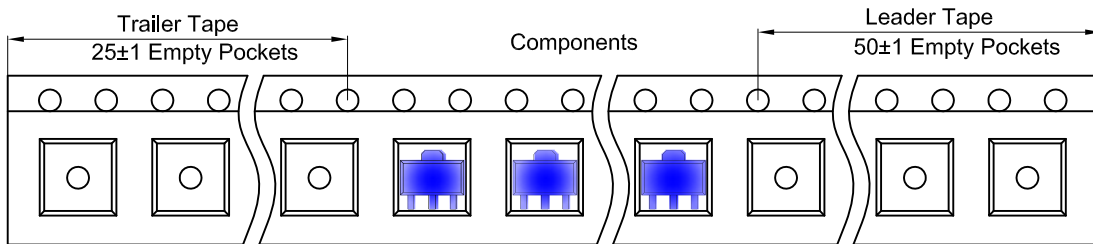
SOT-89-3L Embossed Carrier Tape



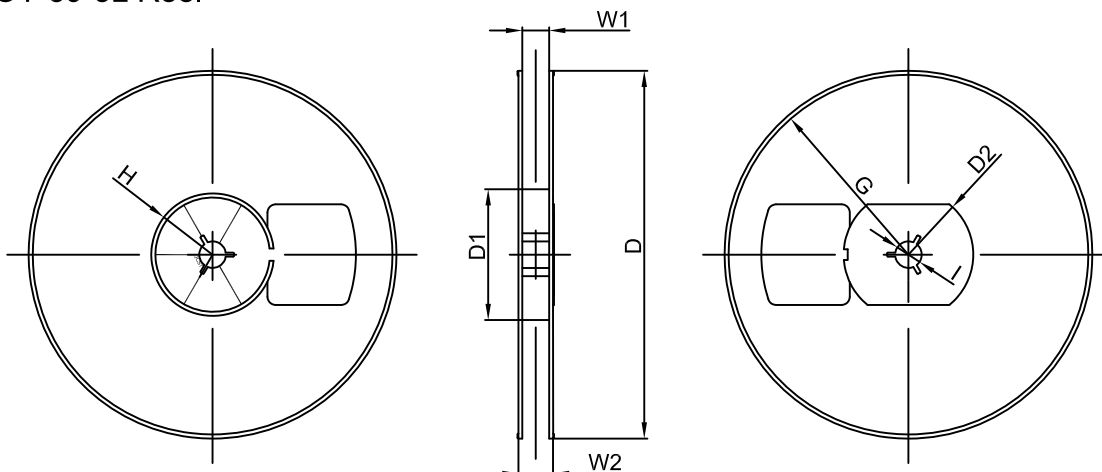
Packaging Description:
 SOT-89-3L parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 1,000 units per 7" or 18.0 cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).

| Dimensions are in millimeter | | | | | | | | | | |
|------------------------------|------|------|------|-------|------|------|------|------|------|-------|
| Pkg type | A | B | C | d | E | F | P0 | P | P1 | W |
| SOT-89-3L | 4.85 | 4.45 | 1.85 | Ø1.50 | 1.75 | 5.50 | 4.00 | 8.00 | 2.00 | 12.00 |

SOT-89-3L Tape Leader and Trailer



SOT-89-3L Reel



| Dimensions are in millimeter | | | | | | | | |
|------------------------------|---------|-------|--------|--------|--------|--------|-------|-------|
| Reel Option | D | D1 | D2 | G | H | I | W1 | W2 |
| 7" Dia | Ø180.00 | 60.00 | R32.00 | R86.50 | R30.00 | Ø13.00 | 13.20 | 16.50 |

| REEL | Reel Size | Box | Box Size(mm) | Carton | Carton Size(mm) | G.W.(kg) |
|----------|-----------|------------|--------------|------------|-----------------|----------|
| 1000 pcs | 7 inch | 10,000 pcs | 203×203×195 | 40,000 pcs | 438×438×220 | |