# PRODUCT DATA SHEET
# IN439

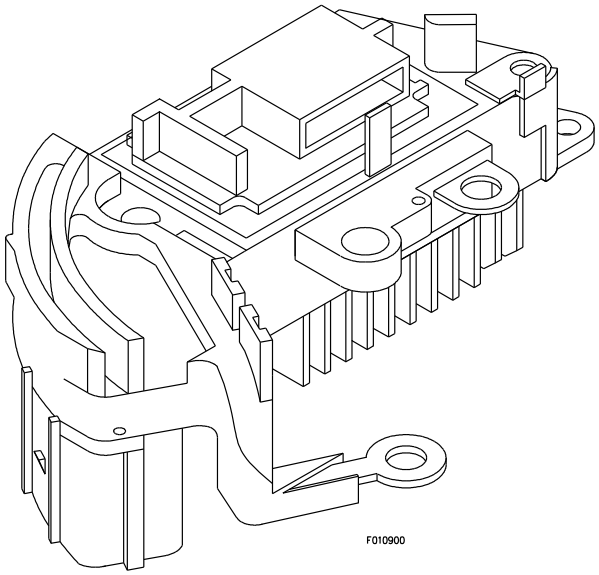


**Figure 1**

| REVISIONS | | | | |
|---|---|---|---|---|
| REV | ECO # | DESCRIPTION | DATE | APPVD |
| 0 | N/A | Initial Release | 1/9/03 | NTR |
| A | | Updated Summary Information/Added LRC. (ECD 5/22/06) | 5/22/06 | NTR |
| | | | | |
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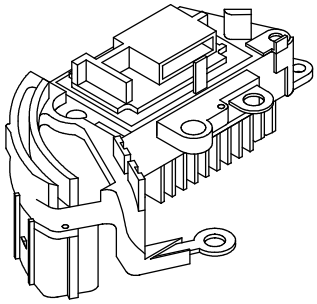
| | | | | |
| | | | | |

| | ORIGINATOR | MECHANICAL ENGINEER | ELECTRICAL ENGINEER | MARKETING | APPROVED ENGINEERING |
|---|---|---|---|---|---|
| NAME | JMC | AHN | GEM | HJ | GEM |
| DATE | 12/11/02 | 12/19/02 | 1/9/03 | 1/9/03 | 1/9/03 |

# NIPPONDENSO REPLACEMENT REGULATOR

**IN439**
TRANSPO REGULATOR



The IN439 functions to keep the battery at full charge, by maintaining the proper output of the alternator under changing load conditions and varying speeds.

**KEY FEATURES**

- "A" circuit, Low side drive regulator.
- Voltage Setpoint is 14.60 Volts.
- Ignition activated.
- Soft-start.
- Undervoltage and Overvoltage light.
- 5 Second LRC.

## 1.0 MECHANICAL CHARACTERISTICS





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Engineering Hot Line: 1-800-327-6903 Sales 1-800-327-7792 Fax: 1-407-298-4519

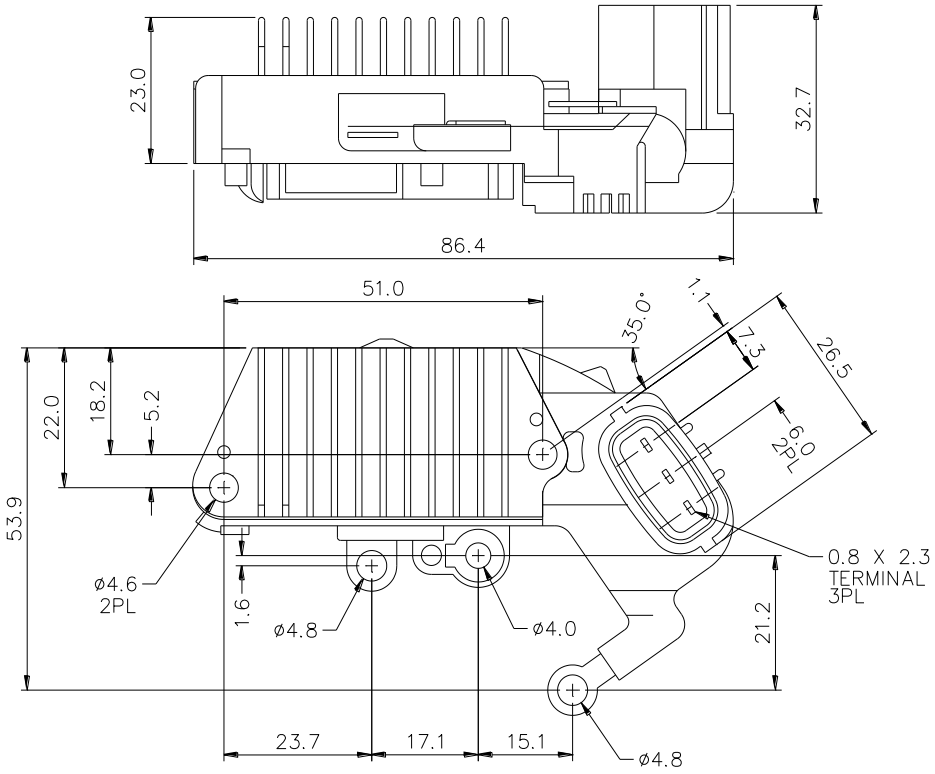


**Figure 2**

**DIMENSION ARE FOR REFERENCE ONLY.**

## 2.0 Pinouts

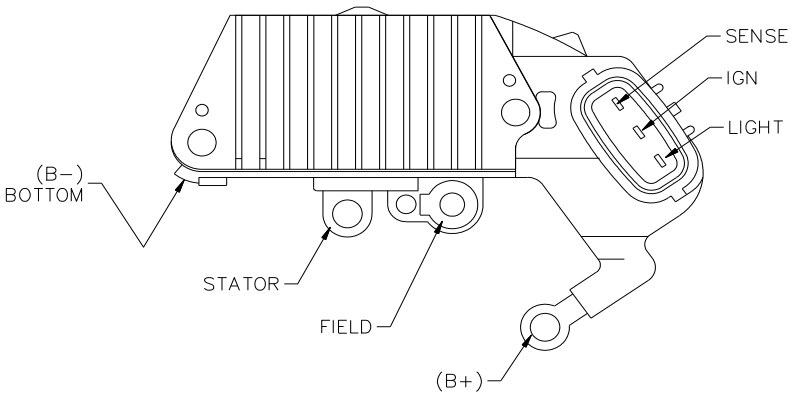






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**Figure 2**

## 3.0 Summary

| PARAMETERS AND CONDITIONS | MIN. | MAX. | UNITS |
|---|---|---|---|
| StandBy Drain @ 12.6v | . | 3 | Ma |
| StandBy Verification @ 12.6v | N/A | 5 | V |
| Soft Start Frequency @ 12.6v | 87 | 113 | Hz |
| Soft Start Duty Cycle @ 12.6v | 27 | 33 | % |
| Light Activation @ 12.6v | 30 | 50 | ma |
| Lamp off Current 40hz @ 12.6v | 0 | 17 | ma |
| Low Speed Response @ 12.6v | 15 | 30 | %/sec |
| Vsat @ 12.6v | 0.1 | 1.6 | V |
| Primary Set Point | 14.4 | 14.8 | V |
| Secondary Set Point | 14.4 | 14.8 | V |
| OverVoltage @ S | 15.5 | 16.9 | V |
| UnderVoltage Light | 9.5 | 10.7 | V |
| Field Diode @ 12.6v | N/A | 1.34 | V |





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