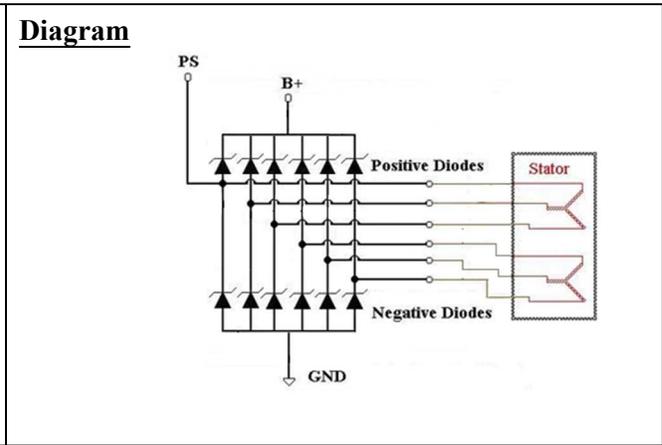
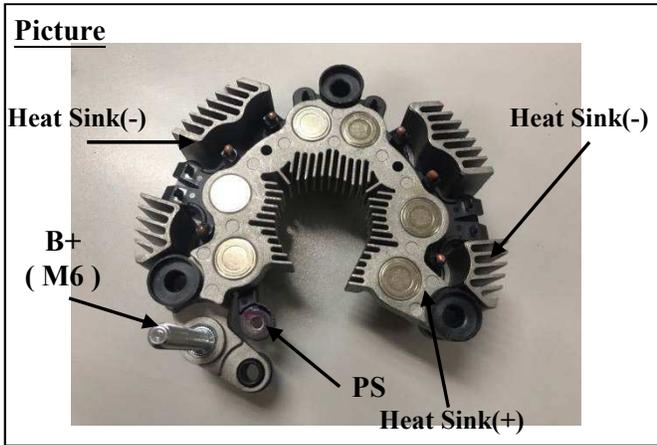


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|-------------|--|-----------|---------------------|
| NAME | RM-254 Electrical Specification | NO | RX-1-1- 1186 |
|-------------|--|-----------|---------------------|



| PARAMETERS AND CONDITIONS | | SYMBOLS | MIN. | TYP. | MAX. | UNITS |
|-----------------------------|--|---------|------|------|------|-------|
| Storage Temperature Range | | Tsto | -40 | ... | 150 | °C |
| Operating Temperature Range | | Tope | -30 | ... | 125 | °C |
| Output Diodes | Avalanche Voltage Range (Diodes $\Delta V_z \leq 2V$) | Vrm | 19 | ... | 24 | V |
| | Average Rectified Forward Current | Io | 35 | ... | ... | A |
| | Maximum Instantaneous Forward Voltage @ If = 80A , T = 25°C | Vf | ... | ... | 1.2 | V |
| | Maximum Reverse Current @ Vrm = 16V | Ir | ... | ... | 1.0 | µA |
| Diodes Trio | Peak Repetitive Reverse Voltage | Vrm | ... | ... | ... | V |
| | Average Rectified Forward Current | Io | ... | ... | ... | A |
| | Maximum Instantaneous Forward Voltage @ If = 2.5 , T = 25°C | Vf | ... | ... | ... | V |
| | Maximum Reverse Current at Vrm | Ir | ... | ... | ... | µA |

| Component | Rating | Tolerance | Remark | Unit |
|-----------|--------|-----------|--------|------|
| Condenser | N.A. | ±10% | ... | µF |
| Resistor | N.A. | ±5% | ... | Ω |

| | | |
|------------------|--------------------------|--|
| Reliability Test | Repetitive Thermal Shock | The Rectifier shall be designed to withstand 500 cycles of -30°C to 125°C in 20minutes and 125°C to -30°C in 20 minutes. |
| | The High Temp. Test | The Rectifier shall be designed to operate reliability at the rated current of alternator is 80% to 100% and at 6000 rpm (shaft speed) for a minimum of 10 hours at 125°C . |
| | Load Dump | The Rectifier shall withstand a voltage peak and noise from load dump transients without failure . Test condition : ON/OFF switch per 10 seconds while the rated current of alternator is 80% to 100% at 6000 rpm and test 200 times . |
| Mechanical Shock | Drop Shock | The Rectifier shall withstand a free fall from one meter onto a cement floor on each of the 3 main axes (x,y,z) two times without failure or performance degradation . |
| | Vibration Shock | The Rectifier shall withstand a vibration according to the following condition without failure or performance degradation . Condition : amplitude acceleration = 15G , vibration frequency = 10~500Hz , a period of 15 minutes for each of the 3 main axes (x,y,z) , test times = 16 cycle . |
| | Salt Spray | The Rectifier shall withstand 8 hours immersion in the solution = 5% of salt water at 35°C without failure or performance degradation . |

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|-----------------------|-------------------------|---------|-------------|--------|----------|-------------|
| 2020.12.14 | | 1 | 魏迪焱 | 沈蓓 | 黄鹏 | MOBILETRON |
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