

MURS220 MURS240 MURS260

### **ULTRAFAST RECTIFIER**

### VOLTAGE RANGE 200 to 600 Volts CURRENT 2.0 Amperes

### **FEATURES**

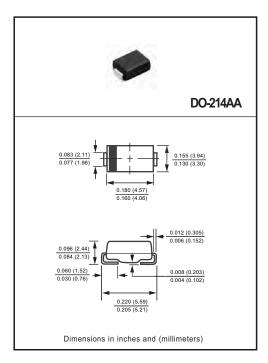
- \* High reliability
- \* Low leakage
- \* Low forward voltage
- \* High current capability
- \* Ultrafast switching speed
- \* High surge capability
- \* Good for switching mode circuit

### **MECHANICAL DATA**

- \* Case: Molded plastic
- \* Epoxy: Device has UL flammability classification 94V-O
- \* Lead: MIL-STD-202E method 208C guaranteed
- \* Mounting position: Any
- \* Weight: 0.098 gram
- \* P/N suffix V means AEC-Q101 qualified, e.g:MURS220V
- \* P/N suffix V means Halogen-free

#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.



#### MAXIMUM RATINGS (@ TA=25 °C unless otherwise noted)

| WAXIMUM RATINGS (@ TA=25 °C unless otherwise noted)   |                                   |              |         |                  |       |  |
|---|-----------------------------------|--------------|---------|------------------|-------|--|
| RATINGS   | SYMBOL                            | MURS220      | MURS240 | RS240 MURS260    |       |  |
| Maximum Recurrent Peak Reverse Voltage  | V <sub>RRM</sub>                  | 200          | 400     | 600              | Volts |  |
| Maximum RMS Voltage   | V <sub>RMS</sub>                  | 140          | 280     | 420              | Volts |  |
| Maximum DC Blocking Voltage   | V <sub>DC</sub>                   | 200          | 400     | 600              | Volts |  |
| Maximum Average Forward Rectified Current at T <sub>A</sub> =55°C                                 | lo                                | 2.0          |         |                  |       |  |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | IFSM                              | 40           | 38      | Amps             |       |  |
| Current Square me   | l <sup>2</sup> t                  | 6.6          | 5.0     | A <sup>2</sup> S |       |  |
| Operating and Storage Temperature Range   | T <sub>J</sub> , T <sub>STG</sub> | -55 to + 150 |         |                  |       |  |

### ELECTRICAL CHARACTERISTICS(@TA=25 °C unless otherwise noted)

| CHARACTERISTICS   |                         | SYMBOL           | MURS220 | MURS240 | MURS260 | UNITS |
|---|-------------------------|------------------|---------|---------|---------|-------|
| Maximum Instantaneous Forward Voltage at 2.0A DC        |                         | V <sub>F</sub>   | 0.95    | 1.30    | 1.45    | Volts |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | @T <sub>A</sub> = 25°C  | - I <sub>R</sub> | 5       |         |         |       |
|   | @T <sub>A</sub> = 150°C |                  | 800     |         |         |       |
| Maximum Reverse Recovery Time (Note 1)                  |                         | trr              | 25      | 50      |         | nSec  |

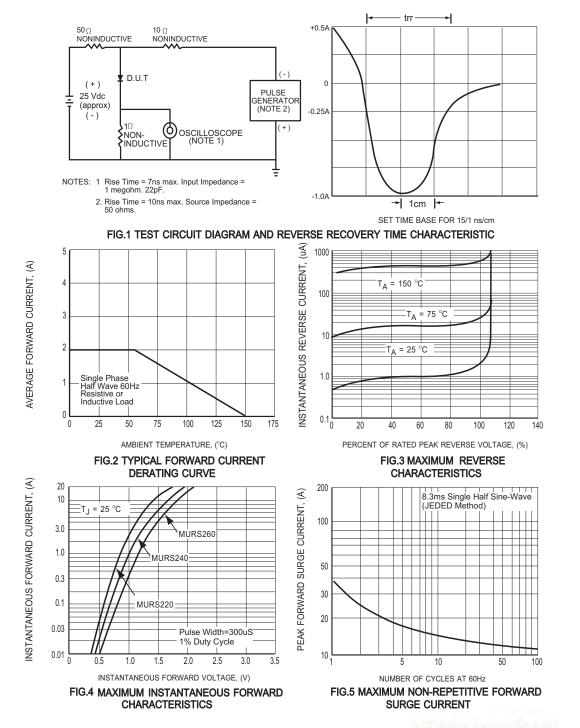
NOTES: 1. Test Conditions:  $I_F = 0.5A$ ,  $I_R = -1.0A$ ,  $I_{RR} = -0.25A$ 

2. " ROHS compliant

Available in Halogen-free epoxy by adding suffix -HF after the part nbr.

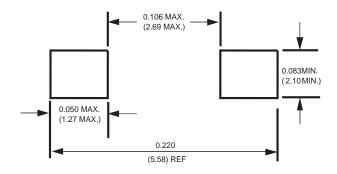
2018-10 REV:D

## RATING AND CHARACTERISTICS CURVES (MURS220 THRU MURS260)





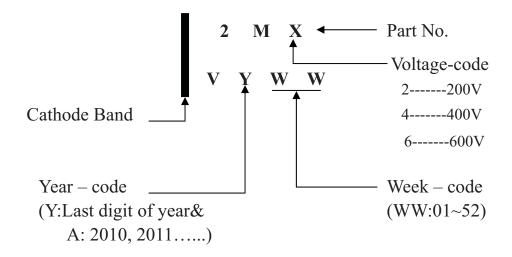
## **Mounting Pad Layout**



Dimensions in inches and (millimeters)



## **Marking Description**



# PACKAGING OF DIODE AND BRIDGE RECTIFIERS

## REEL PACK

| PACKAGE | PACKING<br>CODE | EA PER<br>REEL | EA PER<br>INNER<br>BOX | COMPONENT<br>SPACE<br>(mm) | TAPE SPACE<br>(mm) | REEL DIA<br>(mm) | CARTON SIZE<br>(mm) | EA PER<br>CARTON | GROSS<br>WEIGHT(Kg) |
|---------|-----------------|----------------|------------------------|----------------------------|--------------------|------------------|---------------------|------------------|---------------------|
| SMB     | -W/-T           | 3,000          | 6,000                  |                            |                    | 330              | 360*355*360         | 48,000           | 13.90               |

### **DISCLAIMER NOTICE**

Rectron Inc reserves the right to make changes without notice to any product specification herein, to make corrections, modifications, enhancements or other changes. Rectron Inc or anyone on its behalf assumes no responsibility or liability for any errors or inaccuracies. Data sheet specifications and its information contained are intended to provide a product description only. "Typical" parameters which may be included on RECTRON data sheets and/ or specifications can and do vary in different applications and actual performance may vary over time. Rectron Inc does not assume any liability arising out of the application or use of any product or circuit.

Rectron products are not designed, intended or authorized for use in medical, life-saving implant or other applications intended for life-sustaining or other related applications where a failure or malfunction of component or circuitry may directly or indirectly cause injury or threaten a life without expressed written approval of Rectron Inc. Customers using or selling Rectron components for use in such applications do so at their own risk and shall agree to fully indemnify Rectron Inc and its subsidiaries harmless against all claims, damages and expenditures.

