

# DR200 - DR210

**PRV : 50 - 1000 Volts**  
**Io : 2.0 Amperes**

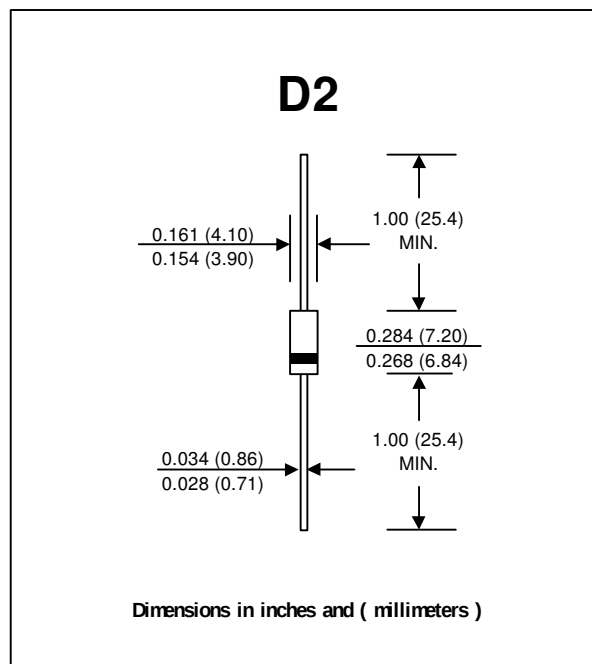
## FEATURES :

- \* High current capability
- \* High surge current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop
- \* Pb / RoHS Free

## MECHANICAL DATA :

- \* Case : D2 Molded plastic
- \* Epoxy : UL94V-O rate flame retardant
- \* Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- \* Polarity : Color band denotes cathode end
- \* Mounting position : Any
- \* Weight : 0.465 gram

## SILICON RECTIFIER DIODES



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 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%.

| RATING                                                                                                                            | SYMBOL          | DR200         | DR201 | DR202 | DR204 | DR206 | DR208 | DR210 | UNIT                 |
|-----------------------------------------------------------------------------------------------------------------------------------|-----------------|---------------|-------|-------|-------|-------|-------|-------|----------------------|
| Maximum Repetitive Peak Reverse Voltage                                                                                           | $V_{RRM}$       | 50            | 100   | 200   | 400   | 600   | 800   | 1000  | V                    |
| Maximum RMS Voltage                                                                                                               | $V_{RMS}$       | 35            | 70    | 140   | 280   | 420   | 560   | 700   | V                    |
| Maximum DC Blocking Voltage                                                                                                       | $V_{DC}$        | 50            | 100   | 200   | 400   | 600   | 800   | 1000  | V                    |
| Maximum Average Forward Current<br>0.375"(9.5mm) Lead Length $T_a = 50\text{ }^{\circ}\text{C}$                                   | $I_F$           | 2.0           |       |       |       |       |       |       | A                    |
| Peak Forward Surge Current<br>8.3ms Single half sine wave Superimposed<br>on rated load (JEDEC Method)                            | $I_{FSM}$       | 75            |       |       |       |       |       |       | A                    |
| Maximum Forward Voltage at $I_F = 2.0\text{ Amps.}$                                                                               | $V_F$           | 1.0           |       |       |       |       |       |       | V                    |
| Maximum DC Reverse Current $T_a = 25\text{ }^{\circ}\text{C}$<br>at rated DC Blocking Voltage $T_a = 100\text{ }^{\circ}\text{C}$ | $I_R$           | 5.0           |       |       |       |       |       |       | $\mu\text{A}$        |
|                                                                                                                                   | $I_{R(H)}$      | 50            |       |       |       |       |       |       | $\mu\text{A}$        |
| Typical Junction Capacitance (Note1)                                                                                              | $C_J$           | 75            |       |       |       |       |       |       | pF                   |
| Typical Thermal Resistance (Note2)                                                                                                | $R_{\theta JA}$ | 20            |       |       |       |       |       |       | $^{\circ}\text{C/W}$ |
| Junction Temperature Range                                                                                                        | $T_J$           | - 65 to + 175 |       |       |       |       |       |       | $^{\circ}\text{C}$   |
| Storage Temperature Range                                                                                                         | $T_{STG}$       | - 65 to + 175 |       |       |       |       |       |       | $^{\circ}\text{C}$   |

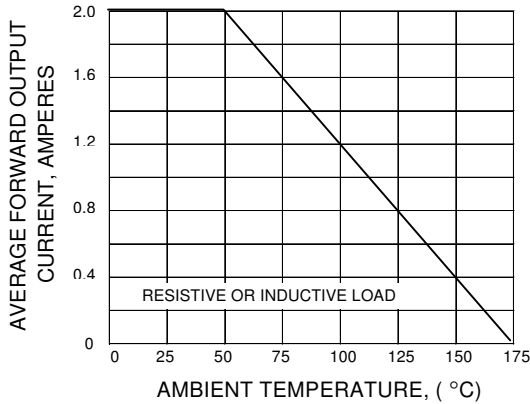
### Notes :

(1) Measured at 1.0 MHz and applied reverse voltage of 4.0V<sub>DC</sub>

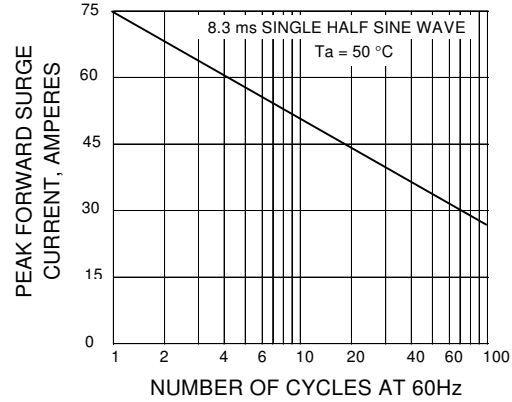
(2) Thermal resistance from Junction to Ambient at 0.375" (9.5mm) Lead Lengths, P.C. Board Mounted.

## RATING AND CHARACTERISTIC CURVES (DR200 - DR210)

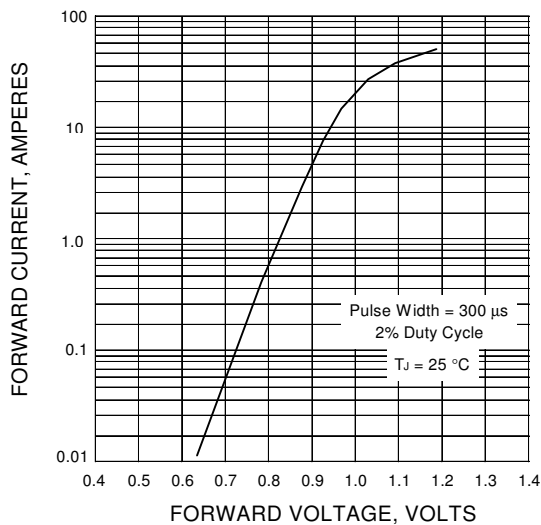
**FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



**FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS**

