



Micro Commercial Components  
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## Features

- Glass Passivated Die
- Low Forward Voltage Drop
- High Current Capability
- High Surge Current
- Low Leakage
- Anode To Tab Configuration

## Maximum Ratings

- Operating Temperature:  $-65^{\circ}\text{C}$  to  $+150^{\circ}\text{C}$
- Storage Temperature:  $-65^{\circ}\text{C}$  to  $+175^{\circ}\text{C}$
- Thermal Resistance Junction to Case ( $R_{\theta jc}$ ):  $0.8^{\circ}\text{C/W}$

| MCC Part Number | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-----------------|----------------------------------------|---------------------|-----------------------------|
| MR2406FR        | 600V                                   | 420V                | 600V                        |

DataSheet4U.com

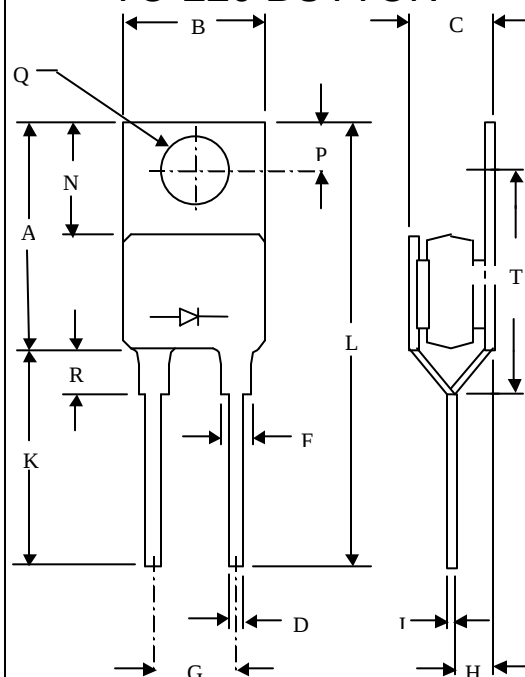
## Electrical Characteristics @ $25^{\circ}\text{C}$ Unless Otherwise Specified

|                                                         |             |                                       |                                                                    |
|---------------------------------------------------------|-------------|---------------------------------------|--------------------------------------------------------------------|
| Average Forward Current                                 | $I_{F(AV)}$ | 24.0A                                 | $T_c = 125^{\circ}\text{C}$                                        |
| Peak Forward Surge Current                              | $I_{FSM}$   | 300A                                  | 8.3ms, half sine                                                   |
| Maximum Instantaneous Forward Voltage                   | $V_F$       | 1.15V                                 | $I_{FM} = 24.0\text{A};$<br>$T_A = 25^{\circ}\text{C}$             |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | $I_R$       | 25 $\mu\text{A}$<br>1.0 $\mu\text{A}$ | $T_c = 25^{\circ}\text{C}$<br>$T_c = 100^{\circ}\text{C}$          |
| Maximum Reverse Recovery Time                           | $T_{rr}$    | 250ns                                 | $I_F = 0.5\text{A}, I_R = 1.0\text{A},$<br>$I_{rr} = 0.25\text{A}$ |
| Typical Junction Capacitance                            | $C_J$       | 95pF                                  | Measured at<br>1.0MHz,<br>$V_R = 4.0\text{V}$                      |

## MR2406FR

## 24 Amp Rectifier 600 Volts

### TO-220 BUTTON

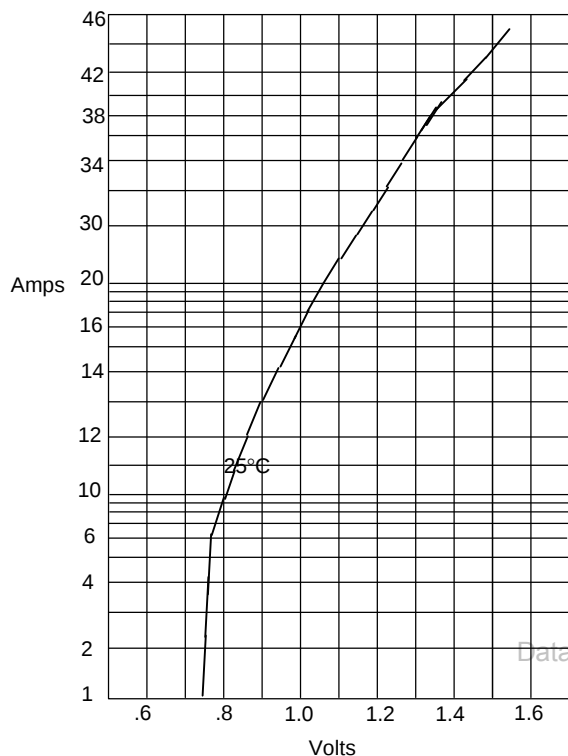


#### DIMENSIONS

| DIM | INCHES |       | M M   |       | NOTE |
|-----|--------|-------|-------|-------|------|
|     | MIN    | MAX   | MIN   | MAX   |      |
| A   | .560   | .625  | 14.22 | 15.88 |      |
| B   | .380   | .420  | 9.65  | 10.67 |      |
| C   | .284   | .310  | 7.21  | 7.87  |      |
| D   | .025   | .045  | 0.64  | 1.14  |      |
| F   | .060   | .090  | 1.52  | 2.29  |      |
| G   | .170   | .210  | 4.32  | 5.33  |      |
| H   | .080   | .110  | 2.03  | 2.92  |      |
| J   | .023   | .029  | 0.58  | 0.74  |      |
| K   | ---    | .562  | ---   | 14.27 |      |
| L   | ---    | 1.187 | ---   | 30.15 |      |
| N   | .230   | .270  | 5.84  | 6.86  |      |
| P   | .100   | .120  | 2.54  | 3.05  |      |
| Q   | .139   | .147  | 3.53  | 3.73  |      |
| R   | ---    | .200  | ---   | 5.08  |      |
| S   | .140   | .150  | 3.55  | 3.80  |      |
| T   | .670   | .690  | 17.02 | 17.53 |      |

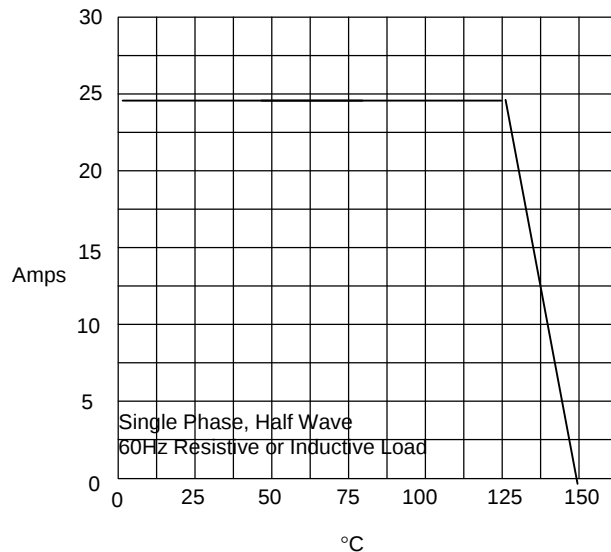
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Figure 1  
Typical Forward Characteristics



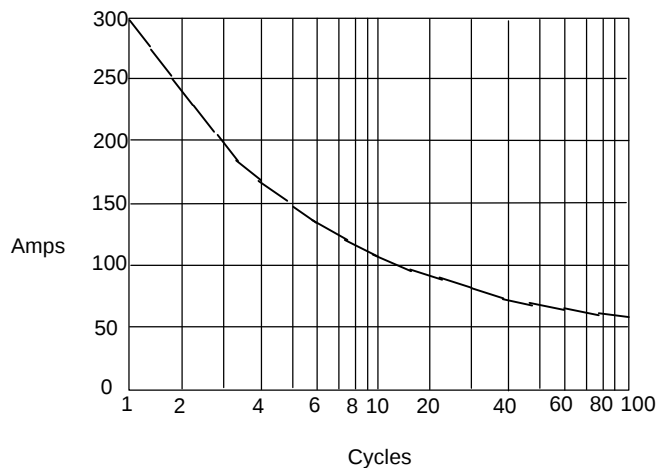
Instantaneous Forward Current - Amperes *versus*  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



Average Forward Rectified Current - Amperes *versus*  
Ambient Temperature - °C

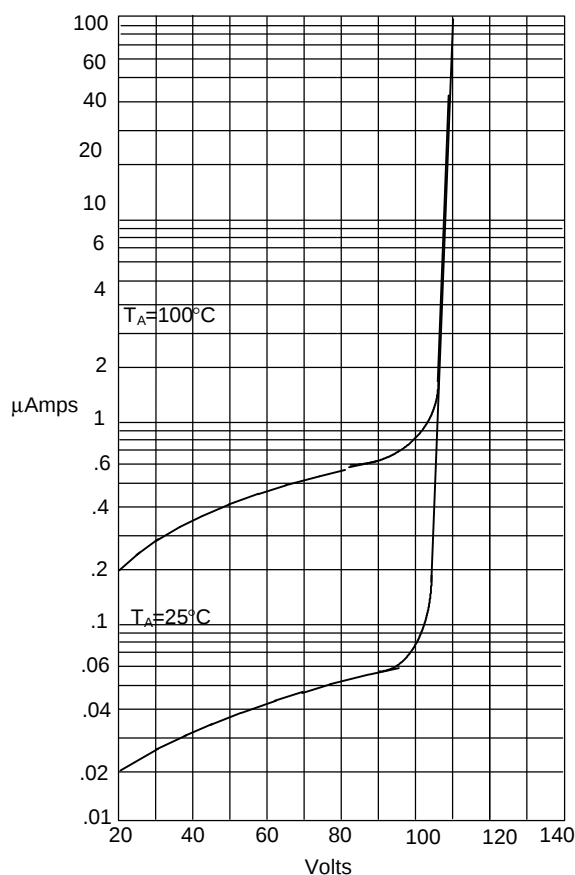
Figure 3  
Maximum Non-Repetitive Forward Surge Current



Peak Forward Surge Current - Amperes *versus*  
Number Of Cycles At 60Hz - Cycles

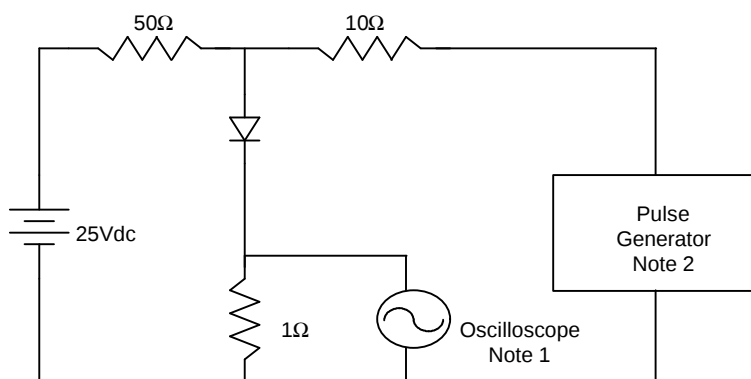
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Figure 4  
Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - MicroAmperes versus  
Percent Of Rated Peak Reverse Voltage - Volts

Reverse Recovery Time Characteristic And Test Circuit Diagram



Notes:

1. Rise Time = 7ns max.  
Input impedance = 1 megohm, 22pF
2. Rise Time = 10ns max.  
Source impedance = 50 ohms
3. Resistors are non-inductive

