



Micro Commercial Components  
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# FST19035 THRU FST19050

## Features

- Metal of siliconrectifier, majonty carrier conducton
- Guard ring for transient protection
- Low power loss high efficiency
- High surge capacity, High current capability

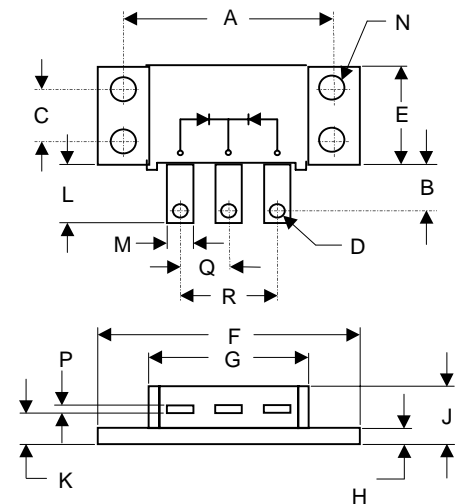
## 200 Amp Schottky Barrier Rectifier 35 to 50 Volts

## Maximum Ratings

- Operating Temperature: -65°C to +150°C
- Storage Temperature: -65°C to +150°C

| MCC Part Number | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-----------------|--|---------------------|-----------------------------|
| FST19035        | 35V                                    | 24.5V               | 35V                         |
| FST12040        | 40V                                    | 28V                 | 40V                         |
| FST12045        | 45V                                    | 31.5V               | 45V                         |
| FST12050        | 50V                                    | 35V                 | 50V                         |

## POWERMOD

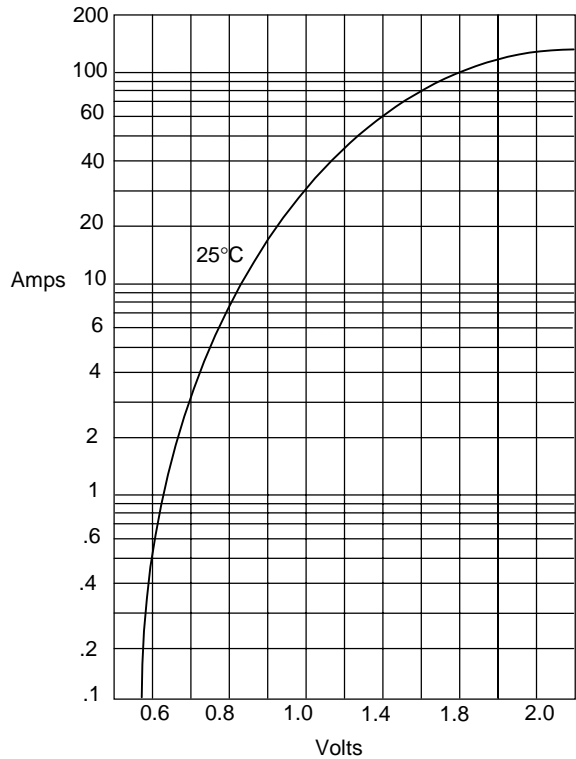


## Electrical Characteristics @ 25°C Unless Otherwise Specified

|   |             |       |   |
|---|-------------|-------|---|
| Average Forward Current                                 | $I_{F(AV)}$ | 200 A | $T_A = 125^\circ\text{C}$                             |
| Peak Forward Surge Current                              | $I_{FSM}$   | 1500A | 8.3ms, half sine                                      |
| Maximum Instantaneous Forward Voltage                   | $V_F$       | .70V  | $I_{FM} = 100.0\text{A};$<br>$T_A = 25^\circ\text{C}$ |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | $I_R$       | 4mA   | $T_A = 25^\circ\text{C}$                              |
| Typical Junction Capacitance                            | $C_J$       | 340pF | Measured at 1.0MHz, $V_R=4.0\text{V}$                 |

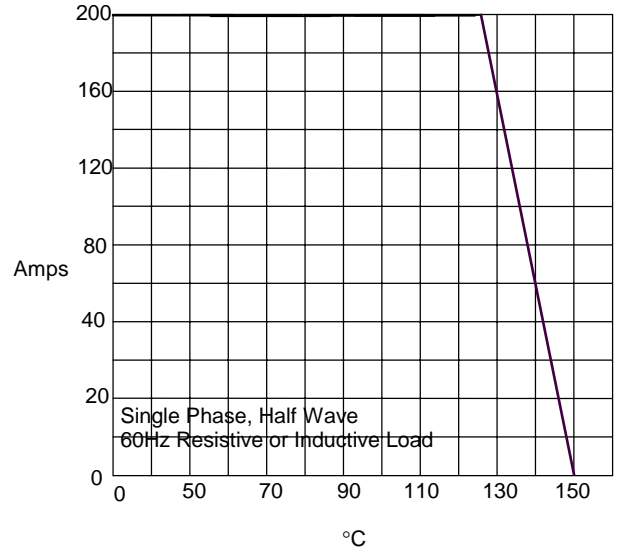
| DIM | DIMENSIONS |       |       |       | NOTE |
|-----|------------|-------|-------|-------|------|
|     | INCH ES    |       | MM    |       |      |
|     | MIN        | MAX   | MIN   | MAX   |      |
| A   | 1.995      | 2.005 | 50.67 | 50.93 |      |
| B   | .330       | .325  | 7.62  | 8.26  |      |
| C   | .495       | .505  | 12.57 | 12.83 |      |
| D   | .182       | .192  | 4.62  | 4.88  |      |
| E   | .990       | 1.010 | 25.12 | 26.65 |      |
| F   | 1.490      | 1.510 | 37.85 | 38.35 |      |
| G   | 1.500      | 1.525 | 38.10 | 38.70 |      |
| H   | .120       | .130  | 3.05  | 3.30  |      |
| J   | -----      | .400  | ----- | 10.16 |      |
| K   | .240       | .260  | 6.10  | 6.60  |      |
| L   | .490       | .510  | 12.45 | 12.95 |      |
| M   | .330       | .350  | 8.38  | 6.90  |      |
| N   | .175       | .195  | 4.45  | 4.95  | ∅    |
| P   | .035       | .045  | 0.89  | 1.14  |      |
| Q   | .445       | .455  | 11.30 | 11.56 |      |
| R   | .890       | .910  | 22.61 | 23.11 |      |

Figure 1  
Typical Forward Characteristics



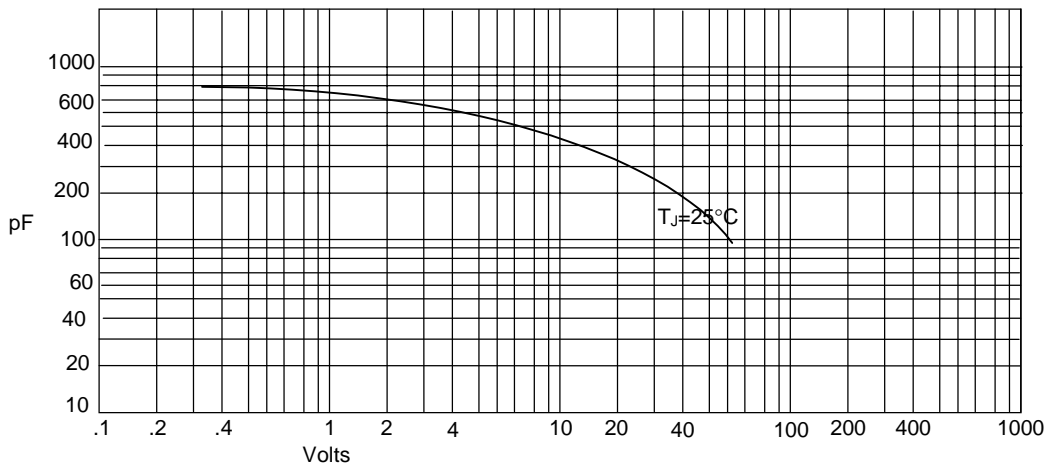
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



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

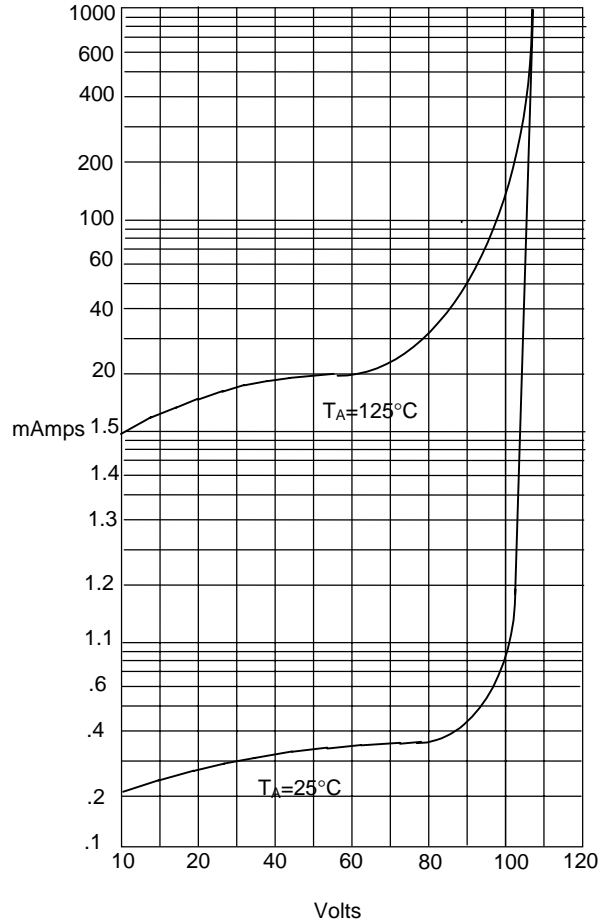
Figure 3  
Junction Capacitance



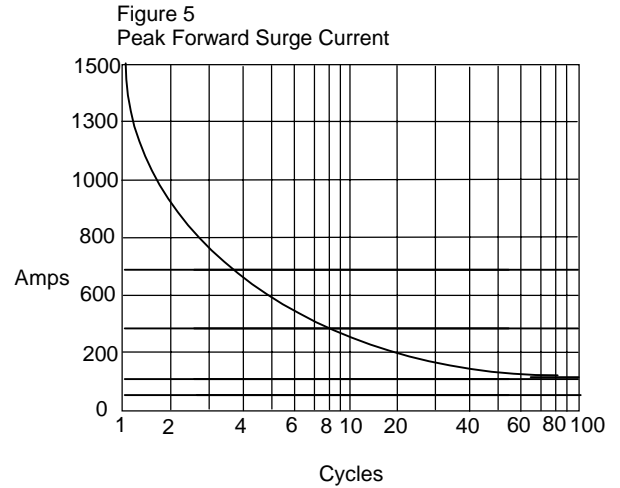
Junction Capacitance - pF versus  
Reverse Voltage - Volts



Figure 4  
Typical Reverse Characteristics



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



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