



## SUPER FAST DIODE MODULE TYPE 520A

## Features

High Surge Capability  
 Type 600V  $V_{RRM}$   
 Isolation Type Package  
 Electrically Isolation base plate

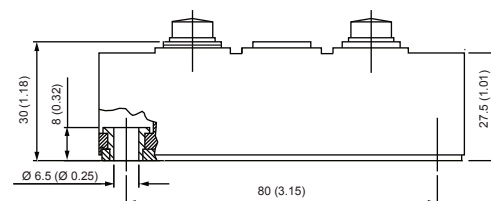


## Maximum Ratings

Operating Temperature :  $-55^{\circ}\text{C}$  to  $+175^{\circ}\text{C}$   
 Storage Temperature :  $-55^{\circ}\text{C}$  to  $+175^{\circ}\text{C}$

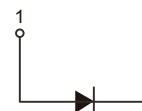
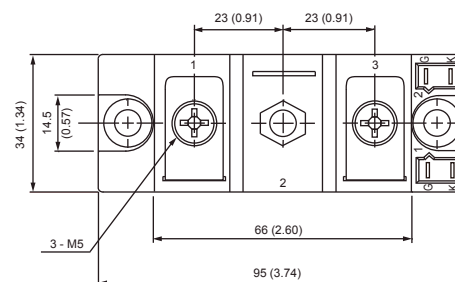
| Part Number | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-------------|--|---------------------|-----------------------------|
| MURIDK52060 | 600V                                   | 420V                | 600V                        |

Dimensions in mm (1 mm = 0.0394")



## Electrical Characteristics @ 25°C Unless Otherwise Specified

|  |                 |                          |  |
|--|-----------------|--------------------------|--|
| Average Forward Current<br>(Per pkg)                               | $I_{F(AV)}$     | 520A                     | $T_C = 100^{\circ}\text{C}$  |
| Peak Forward Surge Current   | $I_{FSM}$       | 9000A                    | 8.3ms, half sine   |
| Maximum Instantaneous Forward Voltage *                            | $V_F$           | 1.35V<br>1.50V           | $I_{FM}=300\text{A}; T_J = 25^{\circ}\text{C}$<br>$I_{FM}=520\text{A}; T_J = 25^{\circ}\text{C}$ |
| Maximum Instantaneous Reverse Current At Rated DC Blockig Voltage* | $I_R$           | $50\mu\text{A}$<br>15mA  | $T_J = 25^{\circ}\text{C}$<br>$T_J = 150^{\circ}\text{C}$  |
| Maximum Reverse Recovery Time                                      | $T_{rr}$        | 350ns                    | $I_F = 0.5\text{A}, I_R = 1.0\text{A}, I_{RR} = 0.25\text{A}$                                    |
| Isolation Voltage  | $V_{isol}$      | 3000V                    | A.C. 1minute   |
| Maximum Thermal Resistance Junction To Case                        | $R_{\theta jc}$ | $0.08^{\circ}\text{C/W}$ |  |



\*Pulse Test: Pulse Width  $300\mu\text{sec}$ , Duty Cycle 2%



Figure .1- Typical Forward Characteristics

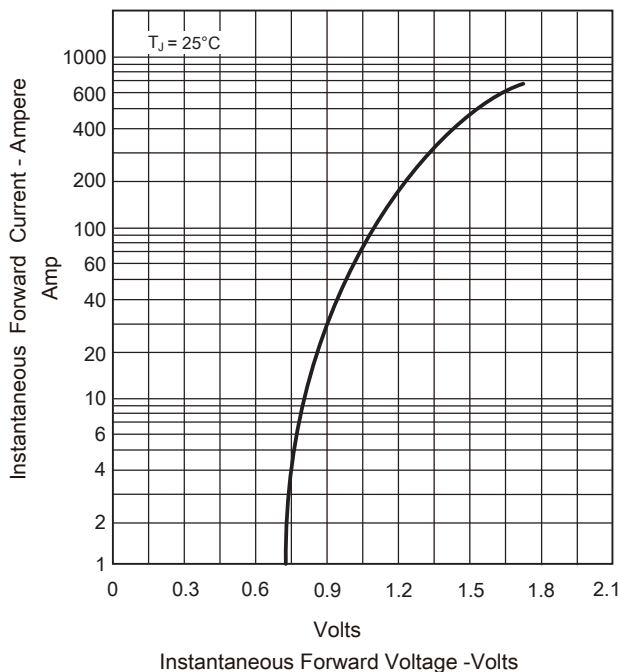


Figure .2-Forward Derating Curve

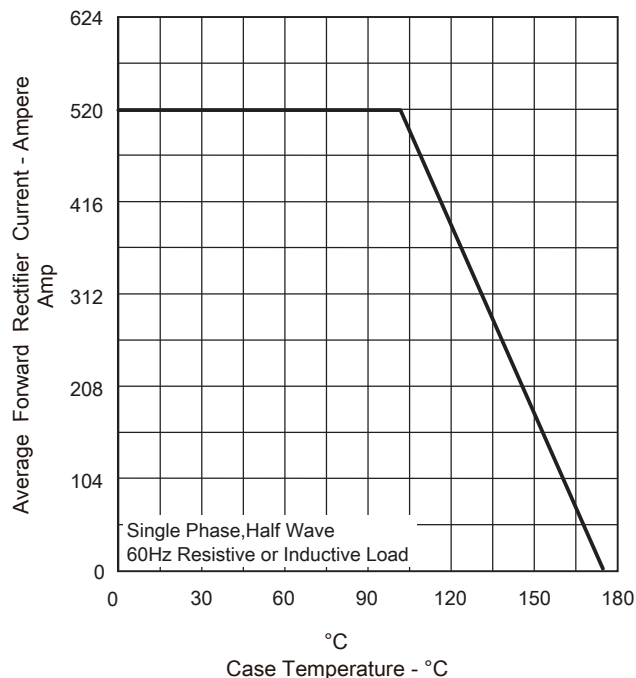


Figure .3-Peak Forward Surge Current

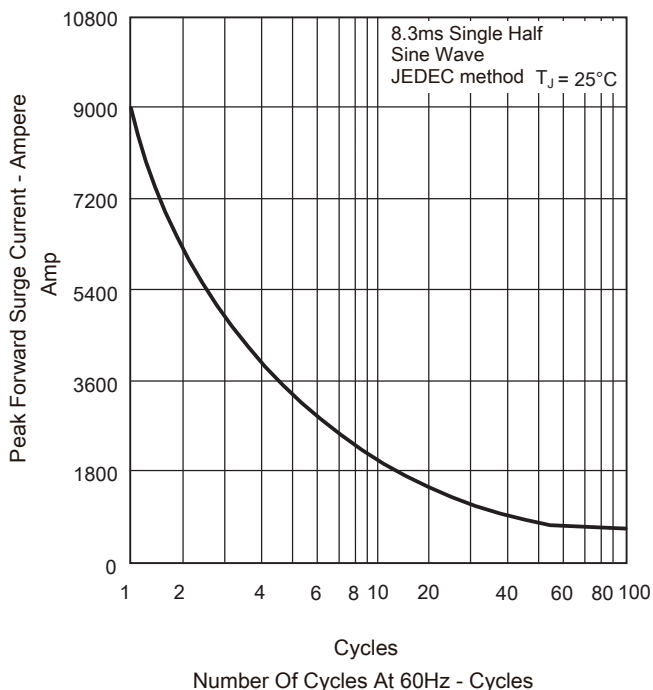


Figure .4-Typical Reverse Characteristics

