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# MUR405 THRU MUR4100

## Features

- Halogen free available upon request by adding suffix "-HF"
- High Surge Capability
- Low Leakage and Low Forward Voltage Drop
- Ultra Fast Switching Speed For High Efficiency
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant.)

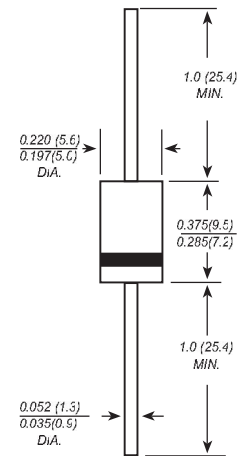
## Maximum Ratings

- Epoxy meets UL 94 V-0 flammability rating
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Typical Thermal Resistance 20°C/W
- Moisture Sensitivity Level 1

## 4 Amp Ultra Fast Recovery Rectifier 50 to 1000 Volts

Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MUR405	MUR405	50V	35V	50V
MUR410	MUR410	100V	70V	100V
MUR415	MUR415	150V	105V	150V
MUR420	MUR420	200V	140V	200V
MUR440	MUR440	400V	280V	400V
MUR460	MUR460	600V	420V	600V
MUR480	MUR480	800V	550V	800V
MUR4100	MUR4100	1000V	700V	1000V

## DO-201AD



## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	4.0A	$T_A = 55^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	150A	8.3ms, half sine
Maximum Instantaneous Forward Voltage MUR405-415 MUR420-460 MUR480-4100	$V_F$	1.00V 1.35V 1.85V	$I_{FM} = 4.0\text{A};$ $T_A = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	10uA 50uA	$T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$
Maximum Reverse Recovery Time MUR405-415 MUR420-460 MUR480-4100	$T_{rr}$	45ns 60ns 75ns	$I_F = 0.5\text{A}, I_R = 1.0\text{A},$ $I_{rr} = 0.25\text{A}$
Typical Junction Capacitance MUR405-460 MUR480-4100	$C_J$	80pF 50pF	Measured at 1.0MHz, $V_R = 4.0\text{V}$

Notes:1.High Temperature Solder Exemption Applied, see EU Directive Annex 7.



# MUR405 thru MUR4100

Figure 1  
Typical Forward Characteristics

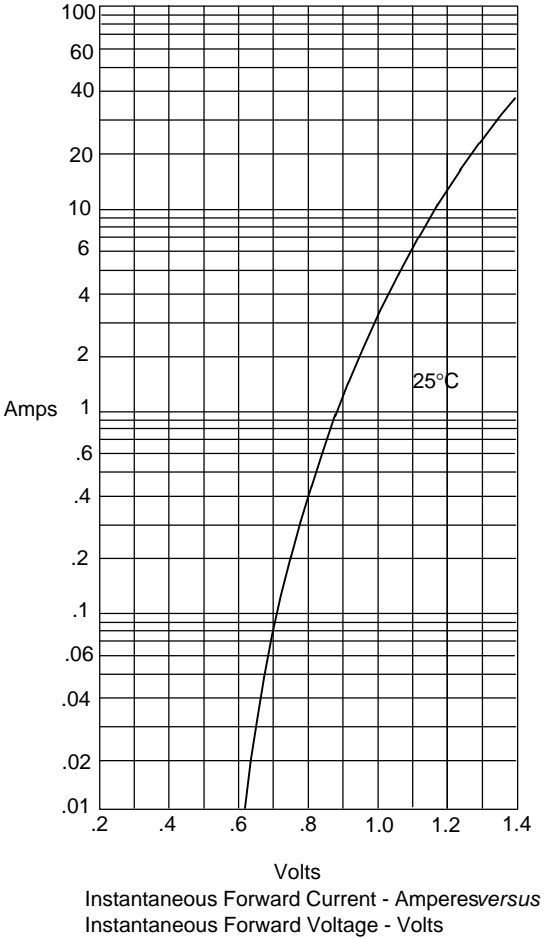
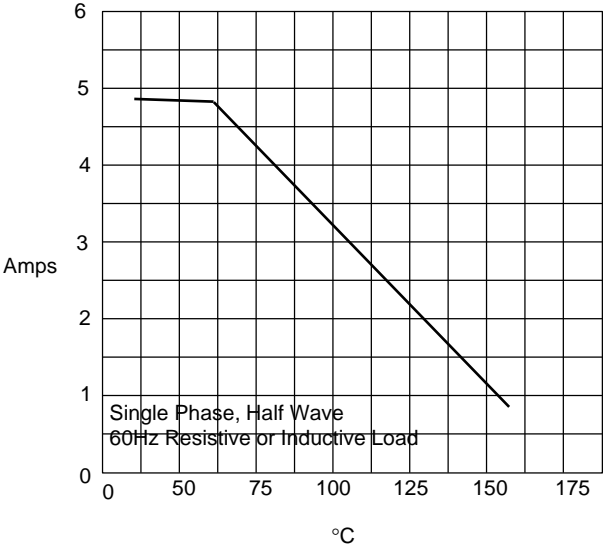
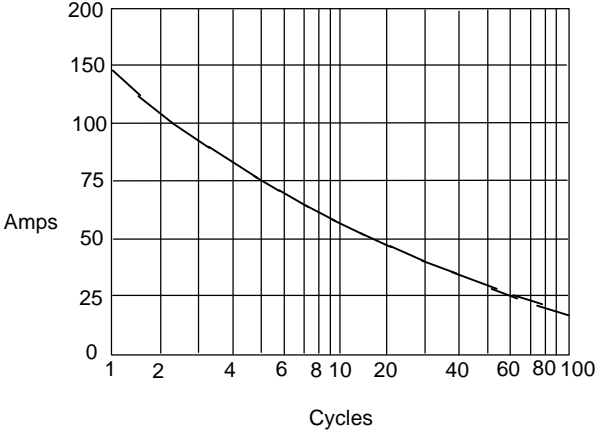


Figure 2  
Forward Derating Curve



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

Figure 3  
Peak Forward Surge Current



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