

Micro Commercial Components



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MUR405GP THRU **MUR4100GP**

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. See ordering information)

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

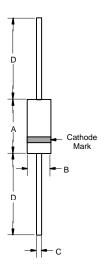
- Maximum Ratings
 Epoxy meets UL 94 V-0 flammability rating
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Typical Thermal Resistance 20°C/W
- Moisture Sensitivity Level 1

| MCC Catalog Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|--------------------------|-------------------|---|---------------------------|--------------------------------------|
| MUR405GP | MUR405G | 50V | 35V | 50V |
| MUR410GP | MUR410G | 100V | 70V | 100V |
| MUR415GP | MUR415G | 150V | 105V | 150V |
| MUR420GP | MUR420G | 200V | 140V | 200V |
| MUR440GP | MUR440G | 400V | 280V | 400V |
| MUR460GP | MUR460G | 600V | 420V | 600V |
| MUR480GP | MUR480G | 800V | 550V | 800V |
| MUR4100GP | MUR4100G | 1000V | 700V | 1000V |

Electrical Characteristics @ 25°C Unless Otherwise Specified

| Average Forward | I _{F(AV)} | 4.0A | $T_A = 55^{\circ}C$ |
|-----------------------------------|--------------------|----------------|---|
| Current | | | |
| Peak Forward Surge | I_{FSM} | 150A | 8.3ms, half sine |
| Current | | | |
| Maximum | | | |
| Instantaneous | | | |
| Forward Voltage | | | |
| MUR405GP-415GP | V_{F} | 1.00V | $I_{FM} = 4.0A;$ |
| MUR420GP-460GP MUR480GP-4100GP | | 1.35V 1.85V | T _A = 25°C |
| Maximum DC | | | |
| Reverse Current At | I_R | 10uA | T _A = 25°C |
| Rated DC Blocking | | <i>Ε</i> ΩΛ | T _A = 100°C |
| Voltage | | 50uA | 1A= 100 C |
| Maximum Reverse | | | |
| Recovery Time | | | |
| MÚR405GP-415GP | т | 45ns | I _E =0.5A, I _R =1.0A, |
| MUR420GP-460GP | Trr | 60ns | |
| MUR480GP-4100GP | | 75ns | I _{rr} =0.25A |
| Typical Junction | | | Measured at |
| Capacitance MUR405GP-460GP | $C_{,l}$ | 80pF | 1.0MHz, V _R =4.0V |
| MUR480GP-4100GP | Oj | 50pF | |

DO-201AD



| DIMENSIONS | | | | | |
|------------|--------|------|-------|------|------|
| | INCHES | | MM | | |
| DIM | MIN | MAX | MIN | MAX | NOTE |
| Α | .287 | .374 | 7.30 | 9.50 | |
| В | .189 | .208 | 4.80 | 5.30 | |
| С | .048 | .052 | 1.20 | 1.30 | |
| D | 1.000 | | 25.40 | | |

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

MUR405GP thru MUR4100GP



Figure 1
Typical Forward Voltage

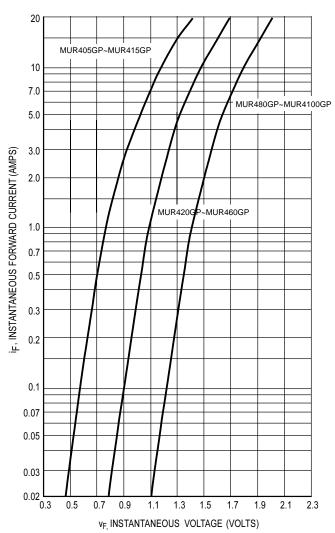
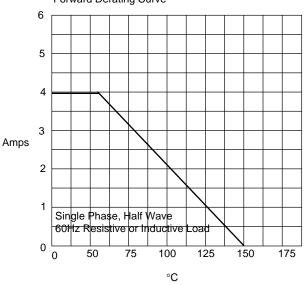
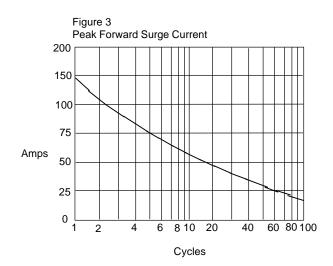


Figure 2 Forward Derating Curve



Average Forward Rectified Current - Amperes/ersus Ambient Temperature - $^{\circ}$ C



Peak Forward Surge Current - Amperesversus Number Of Cycles At 60Hz - Cycles



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Ordering Information:

| Device | Packing | |
|----------------|--------------------------------|--|
| Part Number-TP | Tape&Reel: 1.2Kpcs/Reel | |
| Part Number-AP | Ammo Packing: 1.2Kpcs/Ammo Box | |
| Part Number-BP | Bulk: 12Kpcs/Carton | |

Note: Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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