

Micro Commercial Components



Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

Phone: (818) 701-4933 Fax: (818) 701-4939 1N4933GP **THRU** 1N4937GP

- Features
 Halogen free available upon request by adding suffix "-HF"
- Glass Passivated Junction
- Low Leakage Current and Fast Switching
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant (Note1) ("P"Suffix designates Compliant. See ordering information)

Maximum Ratings

- Operating Temperature: -55°C to + 150°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance; 30 °C/W Junction To Lead

| MCC Catalog Number | Device Marking | Maximum Rœurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|--------------------------|-------------------|---|---------------------------|--------------------------------------|
| 1N4933GP | 1N4933GP | 50V | 35V | 50V |
| 1N4934GP | 1N4934GP | 100V | 70V | 100V |
| 1N4935GP | 1N4935GP | 200V | 140V | 200V |
| 1N4936GP | 1N4936GP | 400V | 280V | 400V |
| 1N4937GP | 1N4937GP | 600V | 420V | 600V |

Flectrical Characteristics @ 25°C Unless Otherwise Specified

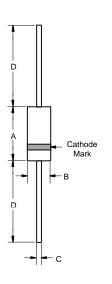
| iceti icai characteristics @ 25 c bilicss bilici wise specific | | | | | |
|--|--------------------|-------|----------------------------------|--|--|
| Average Forward | I _{F(AV)} | 1.0A | T _A =55°C | | |
| Current | | | | | |
| Peak Forward Surge | I _{FSM} | 30A | 8.3ms, half sine | | |
| Current | | | | | |
| Maximum | | | | | |
| Instantaneous | V_{F} | 1.3V | $I_{FM} = 1.0A;$ | | |
| Forward Voltage | | | $T_J = 25^{\circ}C^*$ | | |
| Maximum DC | | | | | |
| Reverse Current At | I_R | 5.0μΑ | $T_J = 25^{\circ}C$ | | |
| Rated DC Blocking | | 50μA | $T_{\rm J} = 100^{\circ}{\rm C}$ | | |
| Voltage | | 100μA | $T_{J} = 125^{\circ}C$ | | |
| Maximum Dayaraa | _ | 20000 | 1 400 | | |
| Maximum Reverse | T _{rr} | 200ns | I _F =1.0A, | | |
| Recovery Time | | | V _R =30V | | |
| Typical Junction | CJ | 15pF | Measured at | | |
| Capacitance | | • | 1.0MHz, | | |
| | | | V _R =4.0V | | |

^{*}Pulse test: Pulse width 300 µsec, Duty cycle 1%

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

1 Amp Glass **Passivated Fast Recovery Rectifier** 50 - 600 Volts

DO-41



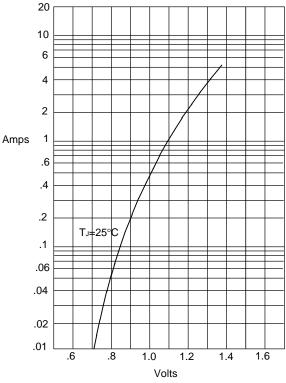
| DIMENSIONS | | | | | | |
|------------|--------|------|-------|------|------|--|
| | INCHES | | MM | | | |
| DIM | MIN | MAX | MIN | MAX | NOTE | |
| Α | .166 | .205 | 4.10 | 5.20 | | |
| В | .080 | .107 | 2.00 | 2.70 | | |
| С | .028 | .034 | .70 | .90 | | |
| D | 1.000 | | 25.40 | | | |

1N4933GP thru 1N4937GP

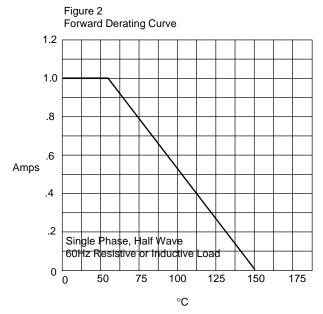


Micro Commercial Components



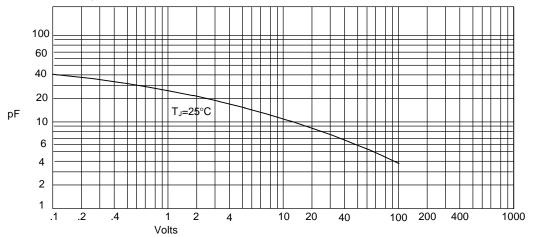


Instantaneous Forward Current - Amperesversus Instantaneous Forward Voltage - Volts



Average Forward Rectified Current - Amperesversus Ambient Temperature - $^{\circ}$ C



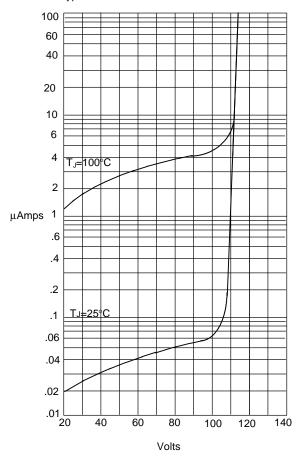


Junction Capacitance - pF*versus* Reverse Voltage - Volts

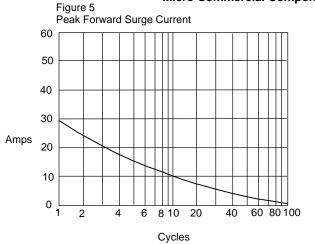
1N4933GP thru 1N4937GP

 $\cdot M \cdot C \cdot C \cdot$

Figure 4
Typical Reverse Characteristics



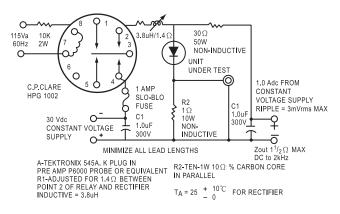
Micro Commercial Components

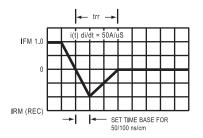


Peak Forward Surge Current - Amperesversus Number Of Cycles At 60Hz - Cycles

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

Figure 6
Reverse Recovery Time Characteristic And Test Circuit Diagram







Ordering Information:

| Device | Packing |
|----------------|------------------------------|
| Part Number-TP | Tape&Reel: 5Kpcs/Reel |
| Part Number-AP | Ammo Packing: 5Kpcs/Ammo Box |
| Part Number-BP | Bulk: 50Kpcs/Carton |

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

IMPORTANT NOTICE

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes. **Micro Commercial Components Corp.** does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp.** and all the companies whose products are represented on our website, harmless against all damages.

LIFE SUPPORT

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

CUSTOMER AWARENESS

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources. MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.