



## DO-204AC (DO-15)

# **Voltage Current** 200 to 1000 V 2.0 A at 55° C







- Glass passivated chip junction
- Hiperectifier structure for high reliability
- Cavity-free glass-passivated junction
- Low forward voltage drop
- Low leakage current, typical I<sub>p</sub> less than 0.1 μA
- High forward surge capability
- Solder dip 260 °C, 10s
- AEC-Q101 qualified
- Component in accordance to RoHS 2011/65/EU and WEEE 2002/96/EC



AUTOMOTIVE



#### **MECHANICAL DATA**

- Case: DO-2014AC (DO-15). Epoxy meets UL 94V-0 flammability rating.
- Polarity: Color band denotes cathode end.
- Terminals: Matte tin plated leads, solderable per MIL-STD-750 Method 2026, J-STD-002 and JESD22-B102.
   Consumer grade, meets JESD 201 class 1A whisker test.
- **HE3 suffix** for high reliability grade, meets JESD 201 class 2 whisker test.



Used in general purpose retification of power supplies, inverters, converters and freewheeling diodes for consumer, automotive and telecommunication.

## Maximum Ratings and Electrical Characteristics at 25 °C

		GP20D	GP20J	GP20M
V <sub>RRM</sub>	Peak Recurrent Reverse Voltage (V)	200	600	1000
I <sub>FAV</sub>	Forward Current at Tamb = 55°C		2.0 A	
I <sub>FRM</sub>	Recurrent Peak Forward Current	20 A		
I <sub>FSM</sub>	8.3 ms. Peak Forward Surge Current (Jedec Method)	80 A		
T <sub>i</sub>	Operating Temperature Range	-55 to +150 °C		
T <sub>stg</sub>	Storage Temperature Range	-55 to +150 °C		
E <sub>RSM</sub>	Maximum non Repetitive Peak Reverse Avalanche Energy. $I_R = 1 \text{ A}; T_j = 25 ^{\circ}\text{C}$	20 mJ		

#### Electrical Characteristics at Tamb = 25 °C

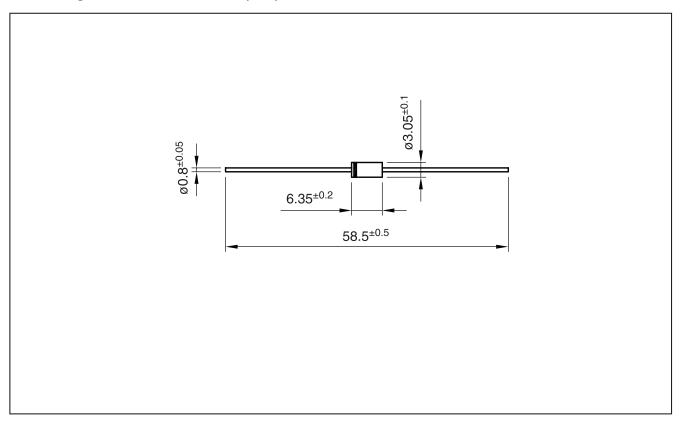
V <sub>F</sub>	Maximum Forward Voltage Drop at I <sub>F</sub> = 2.0 A	1.1 V
	at 25 ºC	5 μΑ
I <sub>R</sub>	Maximum Reverse Current at V <sub>RRM</sub>	
	at 150 °C	200 μΑ
	Max.	50 °C/W
R <sub>th(j-a)</sub>	Thermal Resistance (I= 10mm.)	
	Тур.	30 °C/W



## **Ordering information**

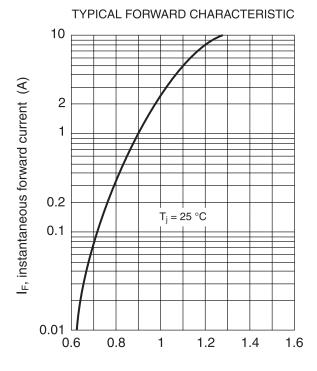
PREFERRED P/N	PACKAGE CODE	DELIVERY MODE	BASE QUANTITY	UNIT WEIGHT (g)
GP20M AMP	AMP	АММО ВОХ	4,000	0.378
GP15M TR	TR	14" diameter tape and reel	4,000	0.378
GP20M HE3 AMP	AMP	АММО ВОХ	4,000	0.378
GP20M HE3 TR	TR	14" diameter tape and reel	4,000	0.378

## Package Outline Dimensions: (mm) DO-15

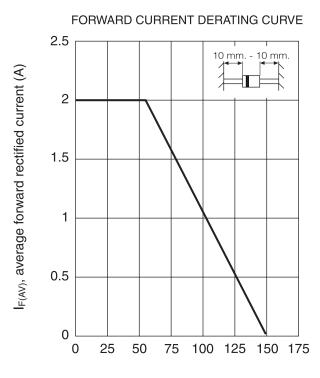




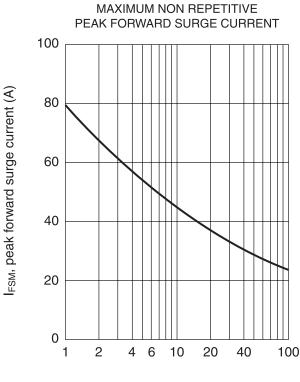
## Rating and Characteristics (Ta 25 °C unless otherwise noted)



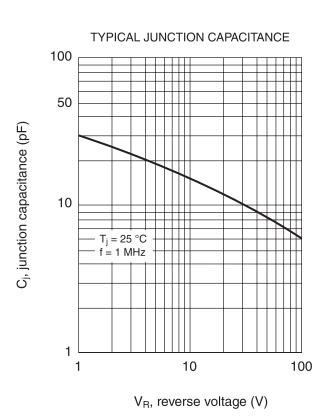
V<sub>F</sub>, instantaneous forward voltage (V)



Tamb, ambient temperature (°C)



Number of cycles at 60 Hz.







### **Revision History**

DATE	REVISION	DESCRIPTION OF CHANGES
14-Jun-2012	0	Original Data Sheet
13-May-2015	1	Add HE3 Version

#### **Disclaimer**

All product, product specifications and data are subject to change without notice to improve reliability, function or design or otherwise.

Fagor Electrónica, S. Coop., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Fagor"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Fagor makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Fagor disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Fagor's knowledge of typical requirements that are often placed on Fagor products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the cutomer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and/or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Fagor's terms and conditions or purchase, including but not limited to the warranty expressed therein.

Except as expressly indicated in writing. Fagor products are not designed for use in medical, life-saving, or life-sustaining applications or for any other application in which the failure of the Fagor product could result in personal injury or death. Customers using or selling Fagor products not expressly indicated for use in such applications do so at their own risk and agree to fully indemnify and hold Fagor and its distributors harmless from and against any and all claims, liabilities, expenses and damages arising or resulting in connection with such use or sale, including attomeys fees, even if such claim alleges that Fagor or its distributor was negligent regarding the design or manufacture of the part. Please contact authorized Fagor personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Fagor. Products names and markings noted herein may be trademarks of their respective owners.

www.fagorelectronica.com Revision: 1 Version: May-15
Document Name: gp20 Page Number: 4 / 4