

# RA251GP THRU RA257GP

## 25.0 Amp Glass passivated Rectifier 50 to 1000 Volts

### Features

- Plastic Material Used Carriers Underwrites Laboratory Flammability Classification 94V-0 and MSL Rating 1
- Low Cost Construction Utilizing Void-free Molded Plastic Technique
- High Surge Capability
- Diffused Junction, Glass Passivated Chip
- Lead Free Finish/RoHS Compliant (Note 1) ("P" Suffix designates Compliant. See ordering information)

### Maximum Ratings

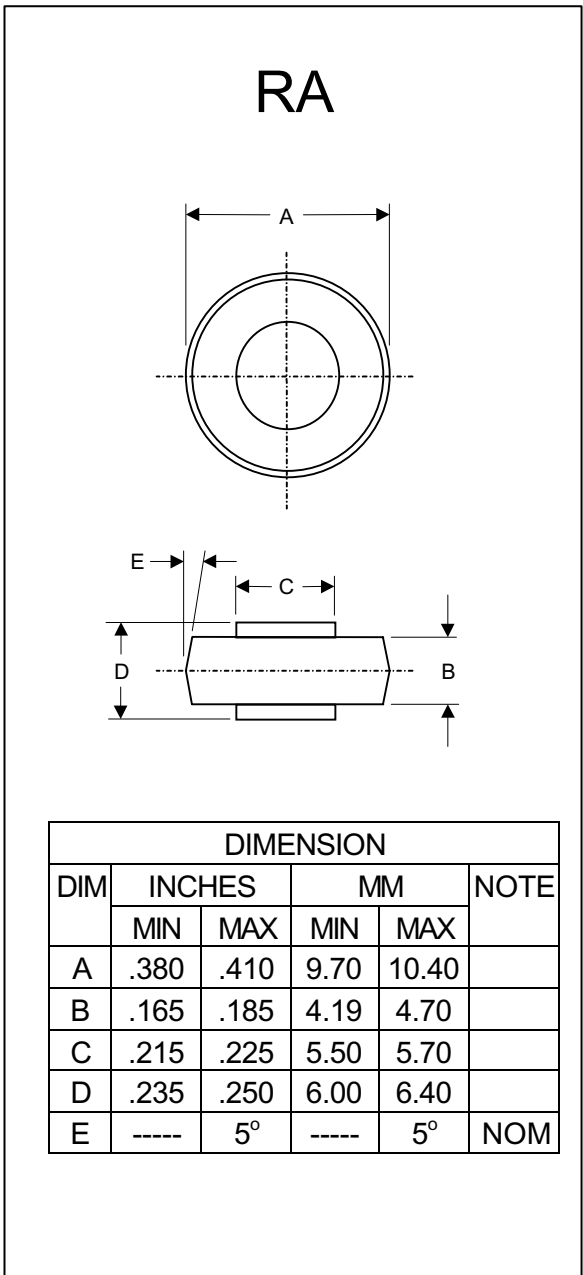
- Operating & Storage Temperature: -50°C to +150°C
- For Capacitive Load, Derate Current by 20%

Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
RA251GP	50V	35V	50V
RA252GP	100V	70V	100V
RA253GP	200V	140V	200V
RA254GP	400V	280V	400V
RA255GP	600V	420V	600V
RA256GP	800V	560V	800V
RA257GP	1000V	700V	1000V

### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	25.0A	$T_C=125^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	400A	8.3ms half sine
Maximum Instantaneous Forward Voltage	$V_F$	1.1V	$I_{FM}=25.0A$ $T_A=25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5.0uA	$T_C=25^\circ\text{C}$
Typical Reverse Recovery Times	$t_{rr}$	3.0us	$I_F=0.5A,$ $I_R=1.0A,$ $I_{rr}=0.25A$
Typical Junction Capacitance	$C_j$	300pF	Measured at 1.0MHz, $V_R=4.0V$

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



## RATINGS AND CHARACTERISTIC CURVES

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

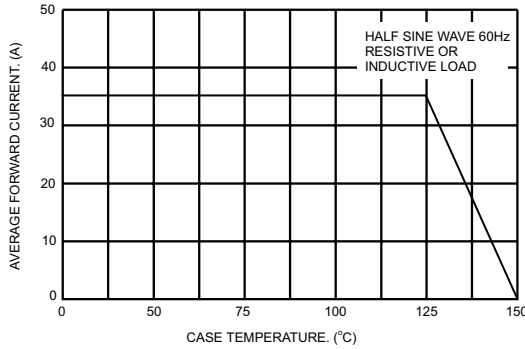


FIG.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

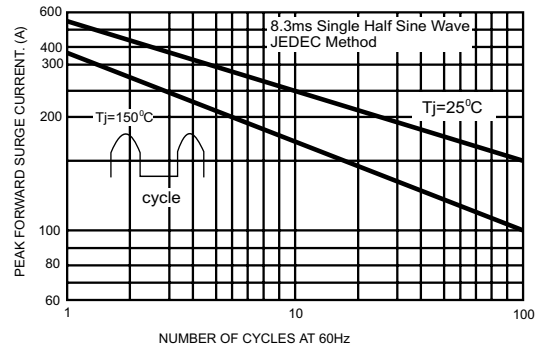


FIG.3- TYPICAL FORWARD CHARACTERISTICS

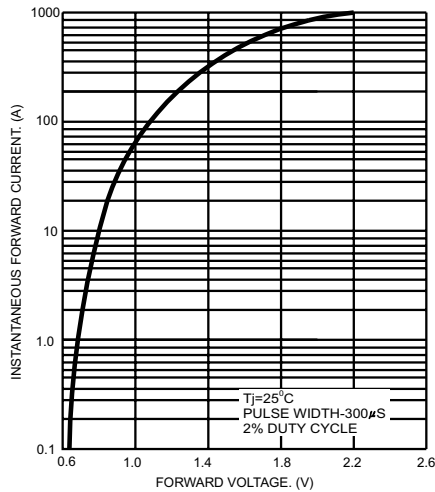


FIG.4- TYPICAL REVERSE CHARACTERISTICS

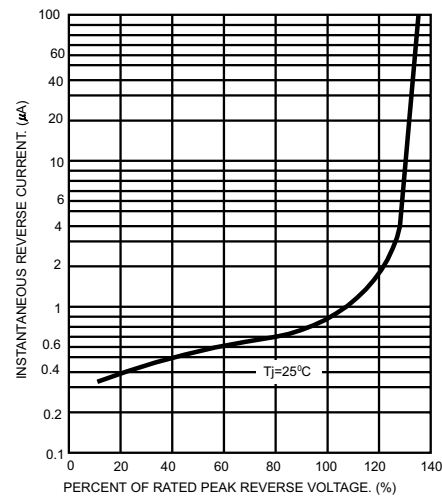
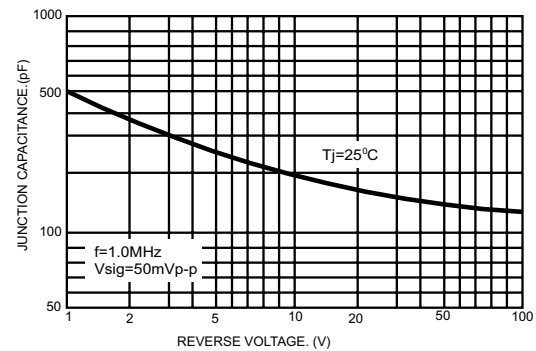


FIG.5- TYPICAL JUNCTION CAPACITANCE





ZIBO MICRO COMMERCIAL  
COMPONENTS CORP.

## Ordering Information

Device	Packing
(Part Number)-BP	Bulk;1Kpcs/Box

**\*\*\*LIFE SUPPORT\*\*\***

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

**\*\*\*CUSTOMER AWARENESS\*\*\***

Counterfeiting of semiconductor parts is a growing problem in the industry. ZiBo Micro Commercial Components Corp. is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. ZBMCC strongly encourages customers to purchase ZBMCC parts either directly from ZBMCC or from Authorized ZBMCC Distributors who are listed by country on our web page cited below. Products customers buy either from ZBMCC directly or from Authorized ZBMCC Distributors are genuine parts, have full traceability, meet ZBMCC's quality standards for handling and storage. ZBMCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources. ZBMCC 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.