

# MSKSEMI 美森科

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

## GBP3005-MS THRU GBP310-MS

Product specification

**VOLTAGE RANGE: 50 - 1000V**  
**CURRENT: 3.0A**

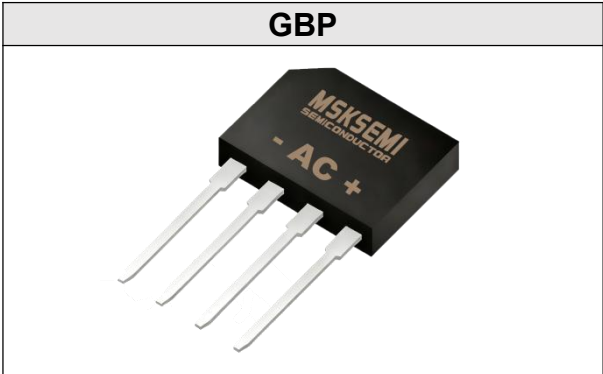
**FEATURES**

- Plastic material has Underwriters Laboratory Flammability Classification 94V-O
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Surge overload rating : 70 Amperes peak

**MECHANICAL DATA**

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Mounting position: Any
- Weight: 0.06 ounce, 1.7 grams

**REFERENCE NEWS**



**Marking**

GBP3005-MS	GBP301-MS	GBP302-MS	GBP304-MS
<div>MSKSEMI GBP3005 + AC -</div>	<div>MSKSEMI GBP301 + AC -</div>	<div>MSKSEMI GBP302 + AC -</div>	<div>MSKSEMI GBP304 + AC -</div>
GBP306-MS	GBP308-MS	GBP310-MS	
<div>MSKSEMI GBP306 + AC -</div>	<div>MSKSEMI GBP308 + AC -</div>	<div>MSKSEMI GBP310 + AC -</div>	

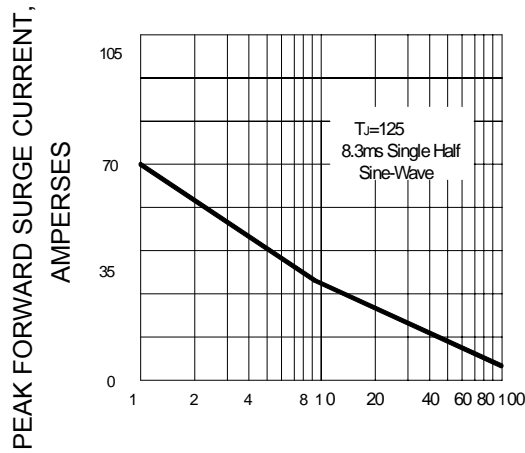
## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

$T_A = 25^\circ\text{C}$  unless otherwise specified  
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	GBP3005-MS	GBP301-MS	GBP302-MS	GBP304-MS	GBP306-MS	GBP308-MS	GBP310-MS	Unit
Maximum recurrent peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum average forward Output current @ $T_A = 25^\circ\text{C}$	$I_{F(AV)}$	3.0							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	$I_{FSM}$	70							A
Maximum instantaneous forward voltage @ 1.5 A	$V_F$	1.0							V
Maximum reverse current @ $T_A = 25^\circ\text{C}$ at rated DC blocking voltage @ $T_A = 100^\circ\text{C}$	$I_R$	5.0 0.5							$\mu\text{A}$ mA
Operating junction temperature range	$T_J$	- 55 ---- + 150							$^\circ\text{C}$
Storage temperature range	$T_{STG}$	- 55 ---- + 150							$^\circ\text{C}$

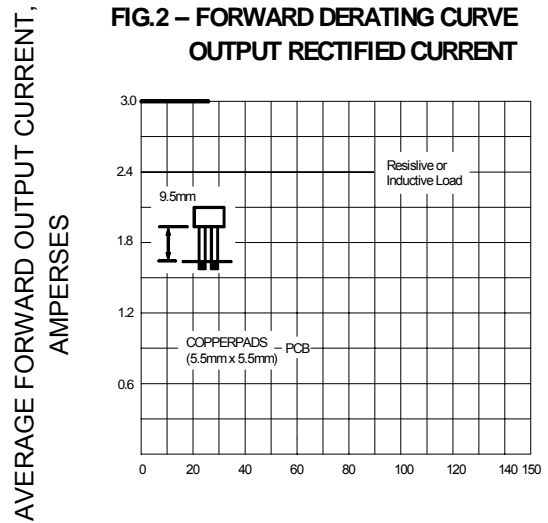
**RATING AND CHARACTERISTIC CURVES (GBP3005-MS THRU GBP310-MS)**

**FIG.1 – PEAK FORWARD SURGE CURRENT**



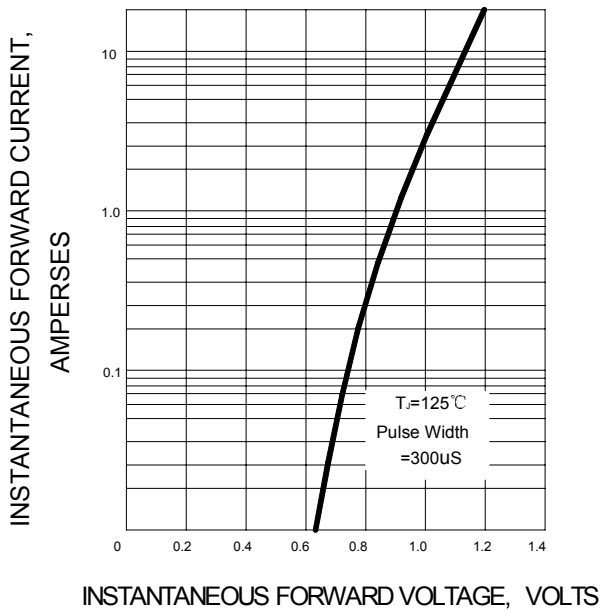
NUMBER OF CYCLES AT 60Hz

**FIG.2 – FORWARD DERATING CURVE  
OUTPUT RECTIFIED CURRENT**



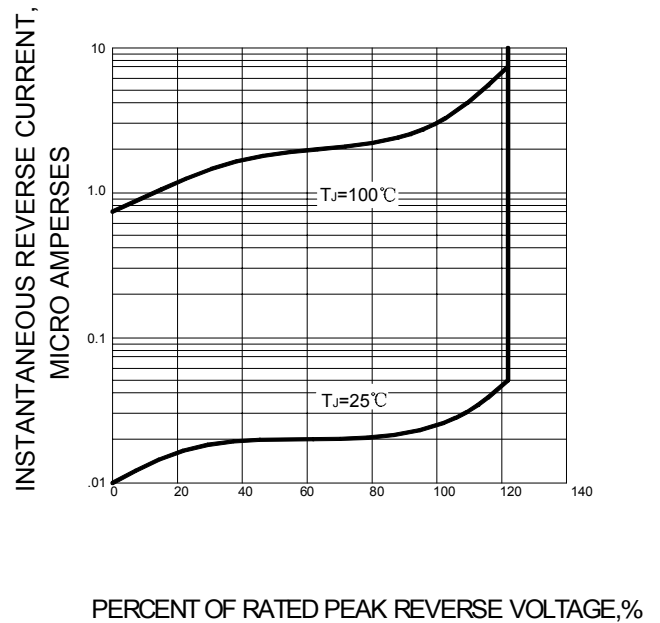
AMBIENT TEMPERATURE, °C

**FIG.3 – TYPICAL FORWARD CHARACTERISTICS**



INSTANTANEOUS FORWARD VOLTAGE, VOLTS

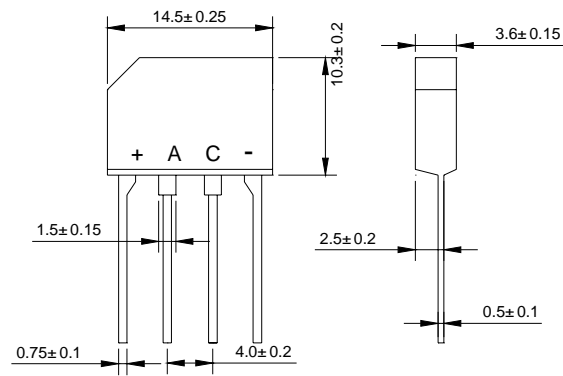
**FIG.4 – TYPICAL REVERSE CHARACTERISTICS**



PERCENT OF RATED PEAK REVERSE VOLTAGE, %

**PACKAGE MECHANICAL DATA**

**GBP**



Dimensions in millimeters

**REELSPECIFICATION**

P/N	PKG	QTY
GBP3005-MS THRU GBP310-MS	GBP	500

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