

# MSKSEMI 美森科

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

## GBP6005-MS THRU GBP610-MS

Product specification

**REVERSE VOLTAGE** - 50 to 1000 Volts  
**FORWARD CURRENT** - 6.0 Amperes


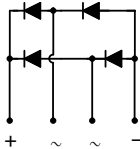
**FEATURES**

- Rating to 1000V PRV
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- The plastic material has UL flammability classification
- 94V#0

**MECHANICAL DATA**

- Polarity : As marked on body
- Weight : 0.05 ounces, 1.52 grams
- Mounting position : Any

**REFERENCE NEWS**

GBP



**Marking**

GBP6005-MS	GBP601-MS	GBP602-MS	GBP604-MS
<div><div>MSKSEMI</div><div>GBP6005</div><div>+ AC -</div></div>	<div><div>MSKSEMI</div><div>GBP601</div><div>+ AC -</div></div>	<div><div>MSKSEMI</div><div>GBP602</div><div>+ AC -</div></div>	<div><div>MSKSEMI</div><div>GBP604</div><div>+ AC -</div></div>
GBP606-MS	GBP608-MS	GBP610-MS	
<div><div>MSKSEMI</div><div>GBP606</div><div>+ AC -</div></div>	<div><div>MSKSEMI</div><div>GBP608</div><div>+ AC -</div></div>	<div><div>MSKSEMI</div><div>GBP610</div><div>+ AC -</div></div>	

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

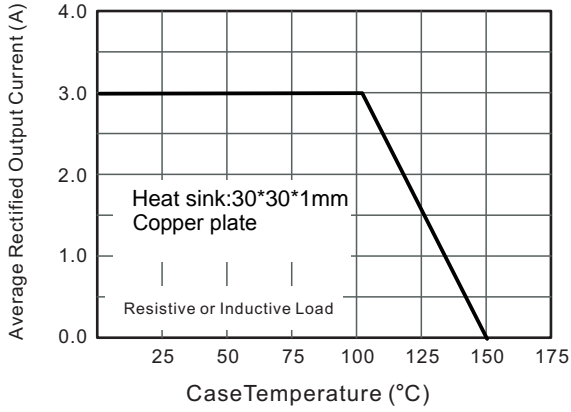
Ratings at 25°C ambient temperature unless otherwise specified.

CHARACTERISTICS	SYMBOL	GBP 6005-MS	GBP 601-MS	GBP 602-MS	GBP 604-MS	GBP 606-MS	GBP 608-MS	GBP 610-MS	UNIT
Maximum Repetitive 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 Rectified (With heatsink) Current @ TC= 105 °C (Without heatsink)	$I_{(AV)}$	6.0 3.0							A
Peak Forward Surge Current 8.3ms single half sine-wave	$I_{FSM}$	150							A
Maximum Forward Voltage at 4.0A DC	$V_F$	1.1							V
Maximum DC Reverse Current at rated Blocking Voltage @Tj=25 °C @Tj= 125°C	$I_R$	5.0 500							uA
$I^2t$ Rating for fusing (3ms≤t ≤8.3ms)	$I^2t$	93							A²S
Typical Junction Capacitance per element (Note 1)	$C_J$	46							pF
Typical thermal resistance(Unit mounted on 75mmx75mmx1.6mm Copper plate heatsink.)	$R_{\theta JC}$	3.0							°C/W
Typical thermal resistance (without heatsink)	$R_{\theta JC}$	8.0							°C/W
Operation and Storage Temperature Range	$T_J, T_{STG}$	-55 to 150							°C

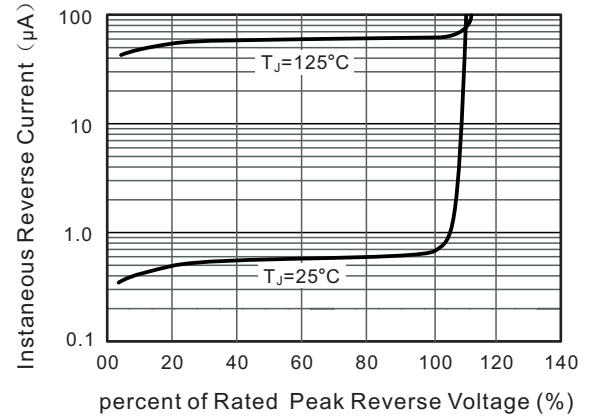
Note : (1) Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

## RATING AND CHARACTERISTIC CURVES (GBP6005-MS THRU GBP610-MS)

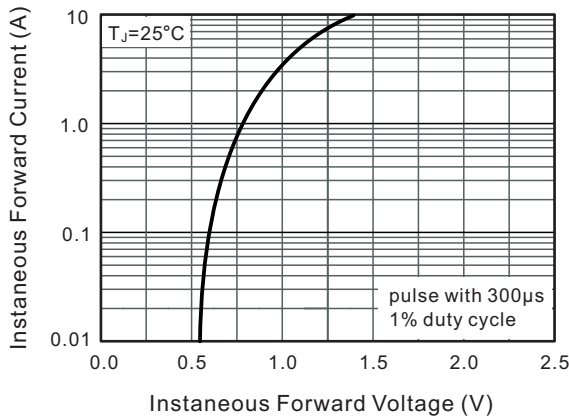
**Fig.1 Average Rectified Output Current Derating Curve**



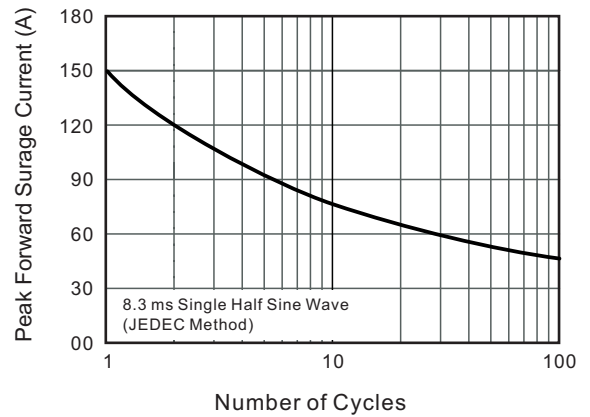
**Fig.2 Typical Reverse Characteristics**



**Fig.3 Typical Instantaneous Forward Characteristics**

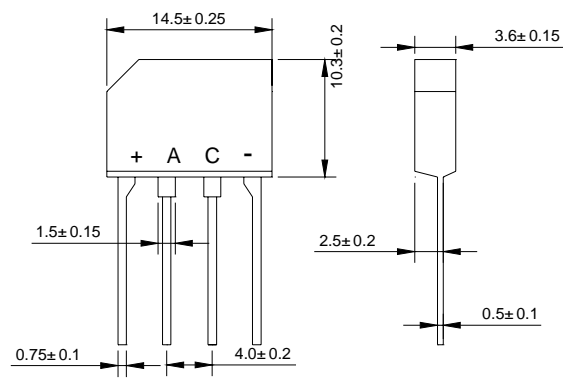


**Fig.4 Maximum Non-Repetitive Peak Forward Surge Current**



PACKAGE MECHANICAL DATA

GBP



Dimensions in millimeters

REELSPECIFICATION

P/N	PKG	QTY
GBP6005-MS THRU GBP610-MS	GBP	500

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