

# MSKSEMI 美森科

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

## GBP4005-MS THRU GBP410-MS

Product specification

**REVERSE VOLTAGE** - 50 to 1000 Volts  
**FORWARD CURRENT** - 4.0 Amperes


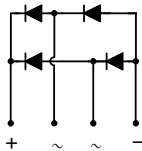
**FEATURES**

- 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**

GBP4005-MS	GBP401-MS	GBP402-MS	GBP404-MS
			
GBP406-MS	GBP408-MS	GBP410-MS	
			

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

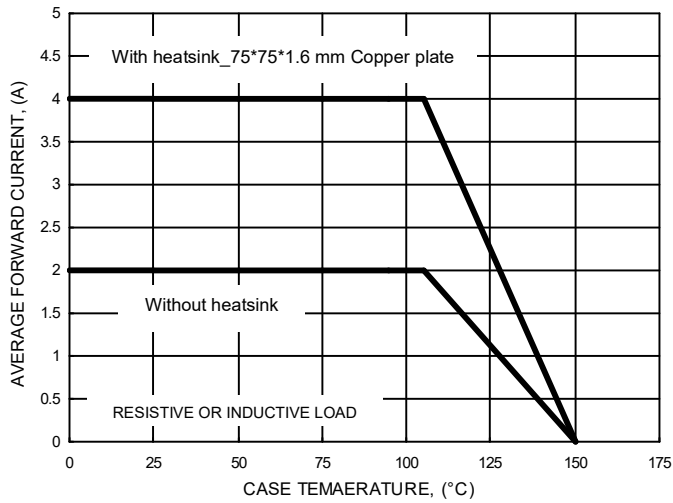
CHARACTERISTICS	SYMBOL	GBP 4005-MS	GBP 401-MS	GBP 402-MS	GBP 404-MS	GBP 406-MS	GBP 408-MS	GBP 410-MS	UNIT
Maximum Repetitive Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @Tc=105°C (With heatsink) (Without heatsink)	I(AV)	4.0 2.0							A
Peak Forward Surge Current 8.3ms single half sine-wave @ Tj = 25 °C	IFSM	75							A
Peak Forward Surge Current 1.0ms single half sine-wave @ Tj =25 °C	IFSM	150							A
Maximum Forward Voltage at 4.0A DC	VF	1.1							V
Maximum DC Reverse Current at rated Blocking Voltage @Tj=25°C @Tj=125°C	IR	5.0 500							uA
I <sup>2</sup> t Rating for fusing (3ms≤t ≤8.3ms)	I <sup>2</sup> t	26.5							A <sup>2</sup> S
Typical Junction Capacitance per element (Note 1)	CJ	50							pF
Typical thermal resistance (Unit mounted on 75mmx75mmx1.6mm Copper plate heatsink.)	RθJC RθJL RθJA	10 12 30							°C/W
Typical thermal resistance (without heatsink)	RθJC RθJL RθJA	12 18 40							°C/W
Operation and Storage Temperature Range	TJ, TSTG	-55 to 150							°C

Note :

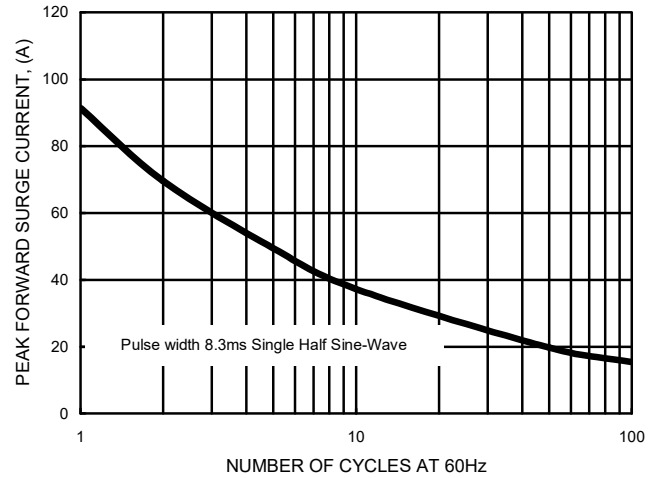
(1) Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

**RATING AND CHARACTERISTIC CURVES (GBP4005-MS THRU GBP410-MS)**

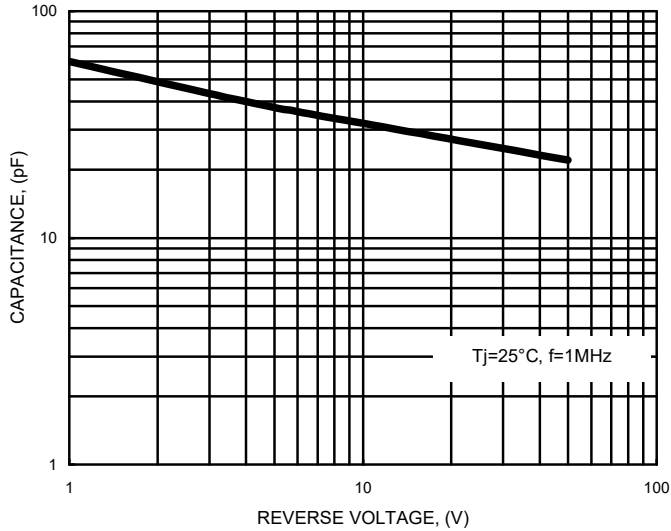
**FIG.1- FORWARD CURRENT DERATING CURVE**



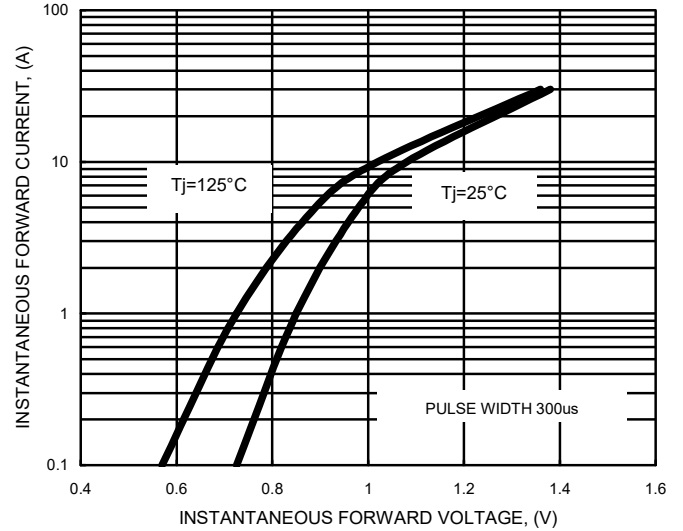
**FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT**



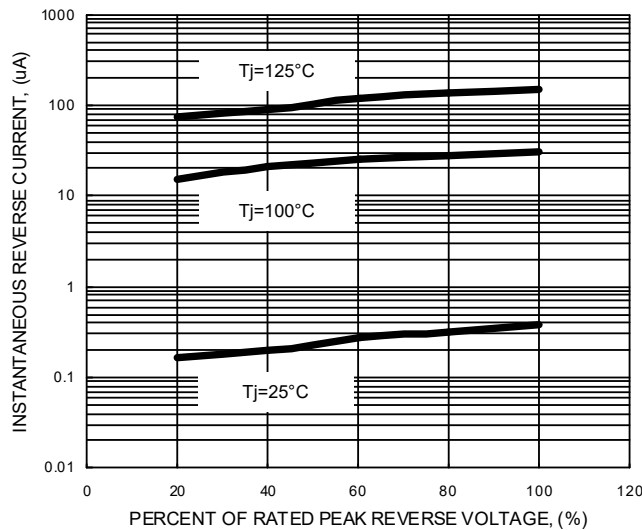
**FIG.3- TYPICAL JUNCTION CAPACITANCE**



**FIG.4- TYPICAL FORWARD CHARACTERISTICS**

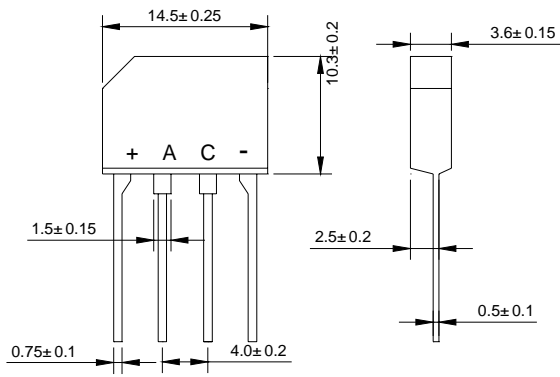


**FIG.5- TYPICAL REVERSE CHARACTERISTICS**



**PACKAGE MECHANICAL DATA**

**GBP**



Dimensions in millimeters

**REEL SPECIFICATION**

P/N	PKG	QTY
GBP4005-MS THRU GBP410-MS	GBP	500

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