



GBL4005 THRU GBL410

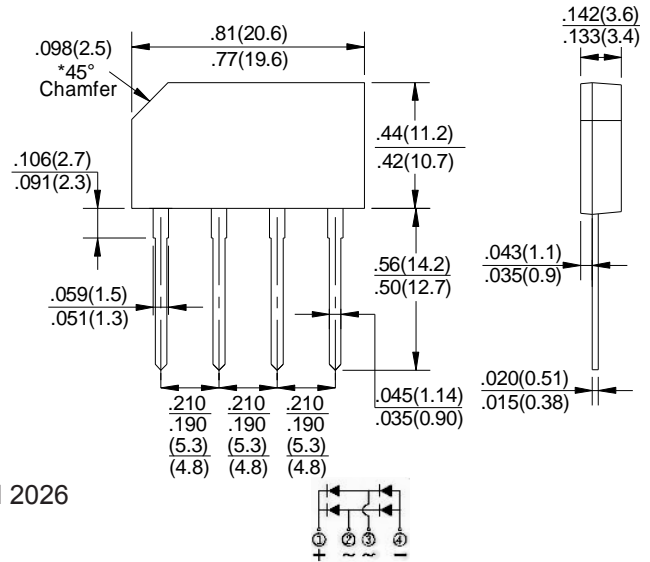
Reverse Voltage - 50 to 1000 Volts Forward Current - 4.0 Amperes

SINGLE BRIDGE RECTIFIERS

Features

- ◆ Glass passivated die construction
- ◆ Low forward voltage drop
- ◆ High current capability
- ◆ High surge current capability
- ◆ Plastic material-UL flammability 94V-O

GBL



Dimensions in inches and (millimeters)

Mechanical Data

Case : JEDEC GBL Molded plastic body

Terminals : Solder plated, solderable per MIL-STD-750, Method 2026

Polarity : Polarity symbol marking on body

Mounting Position : Any

Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	SYMBOLS	MDD	MDD	MDD	MDD	MDD	MDD	MDD	UNITS
		GBL4005	GBL401	GBL402	GBL404	GBL406	GBL408	GBL410	
Marking Code									
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 output rectified current at $T_c=50^\circ\text{C}$ (Note 1)	$I_{(AV)}$	4.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	125.0							A
Maximum instantaneous forward voltage drop per bridge element at 4.0A	V_F	1.1							V
Maximum DC reverse current at rated DC blocking voltage	I_R	$T_A=25^\circ\text{C}$ 10.0							μA
		$T_A=125^\circ\text{C}$ 1.0							mA
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	40							$^\circ\text{C/W}$
Operating junction temperature range	T_J	-55 to +150							$^\circ\text{C}$
storage temperature range	T_{STG}	-55 to +150							$^\circ\text{C}$

Note:1. Mounted on glass epoxy PC board with 1.3mm² solder pad.

2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C..



Ratings And Characteristic Curves

FIG.1-MAXIMUM NON-REPETITIVE SURGE CURRENT

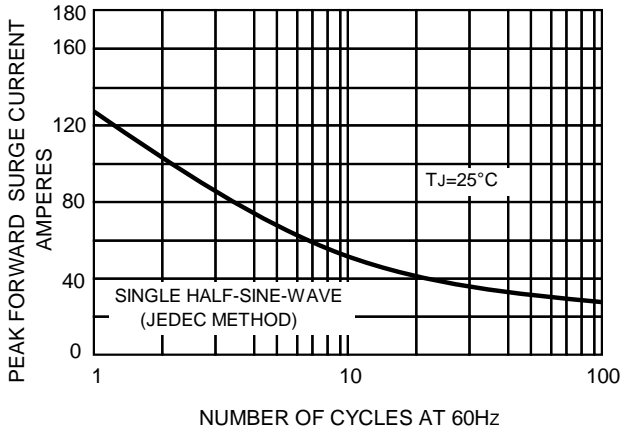


FIG.2-FORWARD DERATING CURRENT

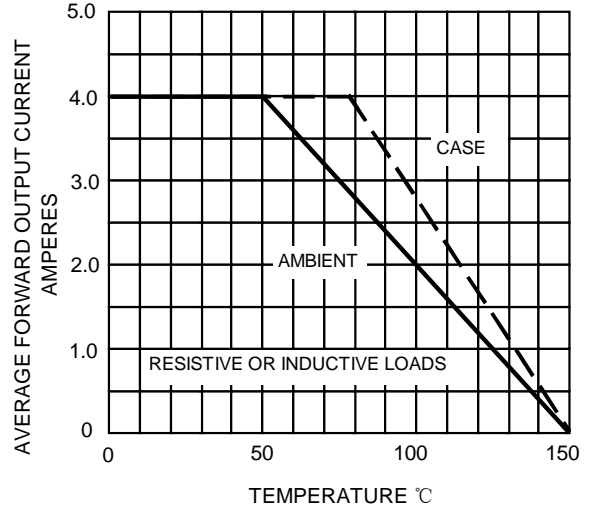


FIG.3-TYPICAL FORWARD CHARACTERISTICS

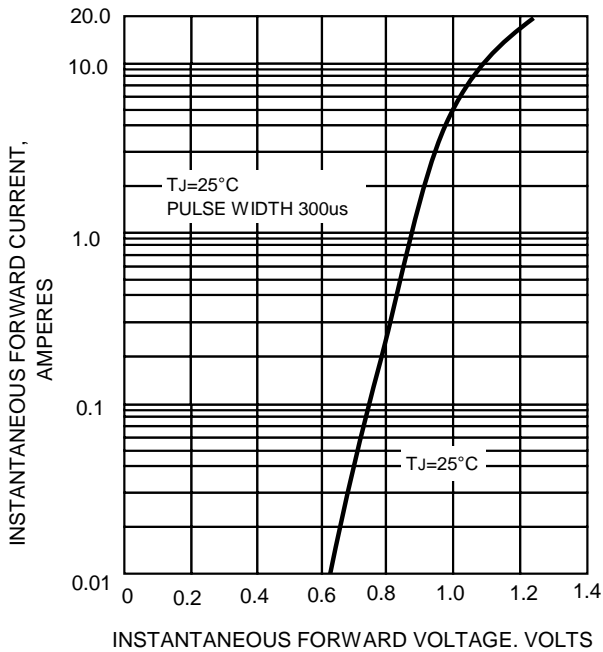
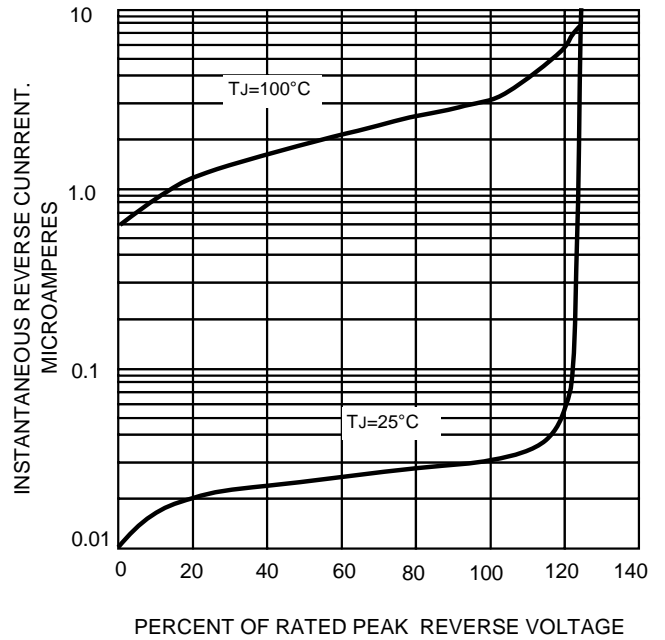


FIG.4-TYPICAL REVERSE CHARACTERISTICS



The curve above is for reference only.