

SILICON BRIDGE RECTIFIERS	<p>REVERSE VOLTAGE - 50 to 1000Volts</p> <p>FORWARD CURRENT - 4.0 Amperes</p>
<p>FEATURES</p> <ul style="list-style-type: none"> ● Surge overload rating -150 amperes peak ● Ideal for printed circuit board ● Reliable low cost construction utilizing molded plastic technique ● Plastic material has U/L flammability classification 94V-0 ● Mounting position: Any 	<p>GBU-C</p> <p style="text-align: center;">Dimensions in inches and (millimeters)</p>

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.
 Single phase, half wave, 60Hz, resistive or inductive load.
 For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	GBU 4005C	GBU 401C	GBU 402C	GBU 404C	GBU 406C	GBU 408C	GBU 410C	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 Rectified Current @ T _C =100°C (with heatsink Note 2)	I _(AV)	4.0						2.4		A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I _{FSM}	150								A
Maximum Forward Voltage at 4.0A DC	V _F	1.0								V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ T _J =25°C	I _R	10.0								µA
Maximum DC Reverse Current at Rated DC Blocking Voltage @ T _J =125°C	I _R	500								
I ² t Rating for Fusing (t<8.3ms)	I ² t	93								A ² s
Typical Junction Capacitance Per Element (Note1)	C _J	45								pF
Typical Thermal Resistance (Note2)	R _{θJC}	2.2								°C/W
Operating Temperature Range	T _J	-55 to +125								°C
Storage Temperature Range	T _{STG}	-55 to +150								°C

NOTES: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
 2. Device mounted on 50mm*50mm*1.6mm cu plate heatsink.



FIG.1-FORWARD CURRENT DERATING CURVE

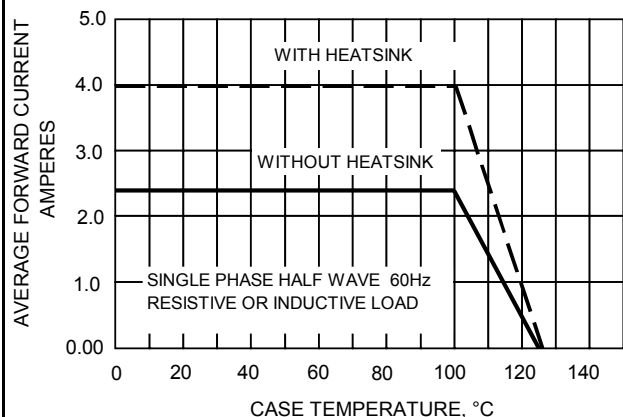


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

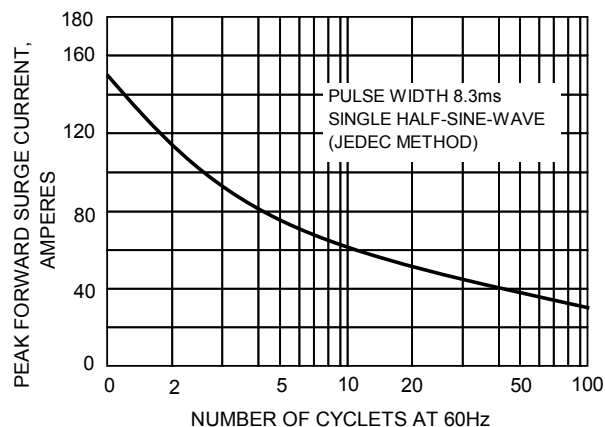


FIG.3-TYPICAL JUNCTION CAPACITANCE

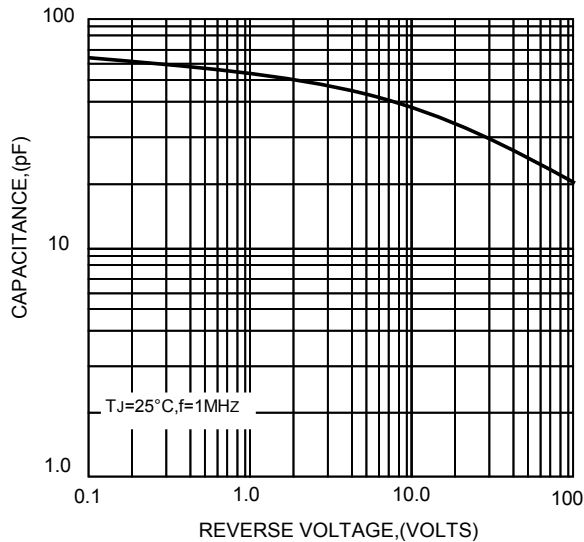


FIG.4-TYPICAL FORWARD CHARACTERISTICS

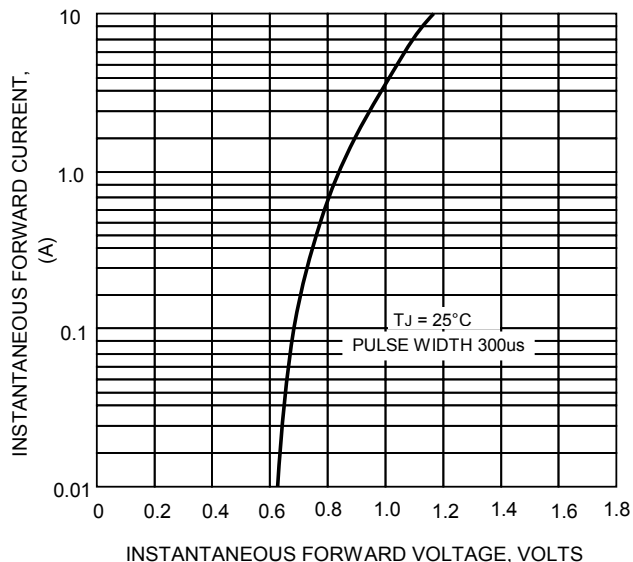


FIG.5-TYPICAL REVERSE CHARACTERISTICS

