



GBPC25005 thru GBPC2510

25.0 A Single-Phase Silicon Bridge Rectifier Rectifier Reverse Voltage 50 to 1000V

Features

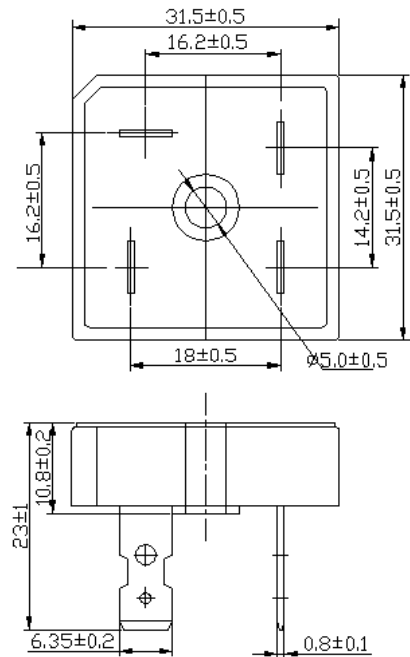
- Ideal for printed circuit board mounting
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- Built-in printed circuit board stand-offs
- High case dielectric strength
- High temperature soldering guaranteed 260°C/5 seconds

Mechanical Data

Case: Reliable low cost construction utilizing molded plastic technique

Terminals: Plated leads solderable per MIL-STD-202, Method 208

Mounting Position: Any



Dimensions in inches and (millimeters)

Maximum Ratings & Thermal Characteristics

Rating at 25°C ambient temperature unless otherwise specified, Resistive or Inductive load, 60 Hz.
For Capacitive load derate current by 20%.

CHARACTERISTICS	SYMBOL	GBPC 25005	GBPC 2501	GBPC 2502	GBPC 2504	GBPC 2506	GBPC 2508	GBPC 2510	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	30	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward (with heatsink Note 2) @ T _C =85°C	I _(AV)	25.0							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I _{FSM}	350							A
Maximum Forward Voltage at 12.5A DC	V _F	1.1							V
Maximum DC Reverse Current @ T _J =25°C at Rated DC Blocking Voltage @ T _J =125°C	I _R	10 500							uA
Rating for fusing (t<8.3ms)	I ² t	508							A ² sec
Operating Temperature Range	T _J	-55 to +150							°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 300mm*300mm*1.6mm cu plate heatsink.

Rating and Characteristic Curves ($T_A = 25^{\circ}\text{C}$ Unless otherwise noted)

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FIG.1-FORWARD CURRENT DERATING CURVE

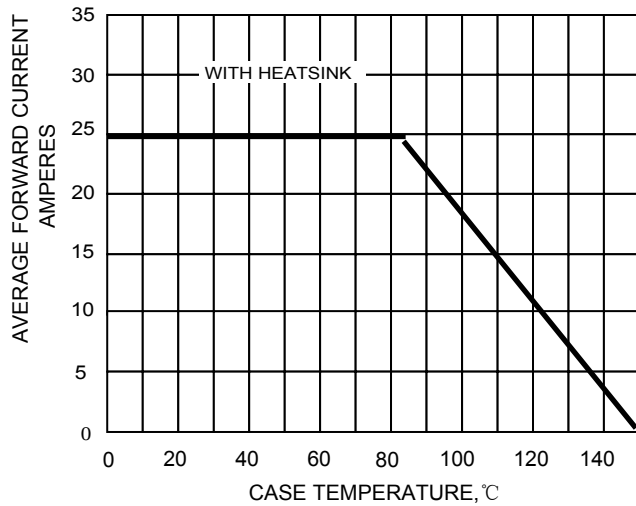


FIG.2-MAXMUN NON-REPETITIVE SURGE CURRENT

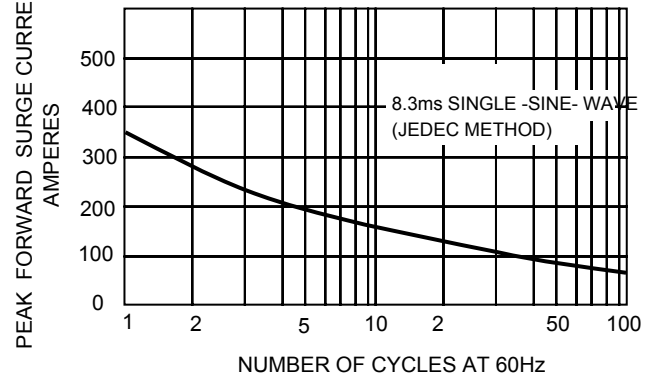


FIG.3-TYPICAL REVERSE

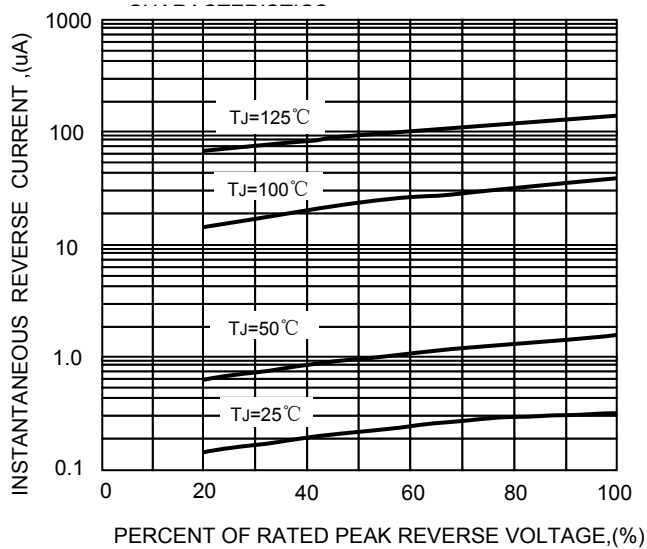


FIG.4-TYPICAL FORWARD CHARACTERISTICS

