

20.0 A Single-Phase Silicon Bridge Rectifier

Rectifier Reverse Voltage 50 to 1000V

Features

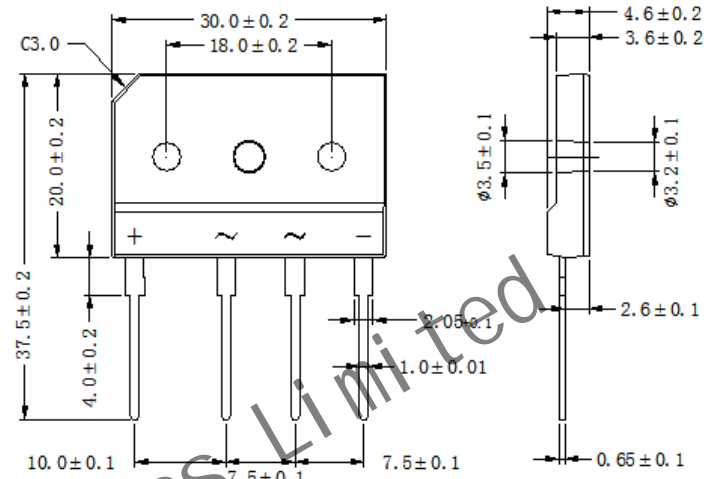
- Ideal for printed circuit board mounting
- This series is UL listed under the Recognized Component Index
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- Built-in printed circuit board stand-offs
- High case dielectric strength
- High temperature soldering guaranteed 260°C /5 seconds at 5 lbs (2.3kg) tension

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

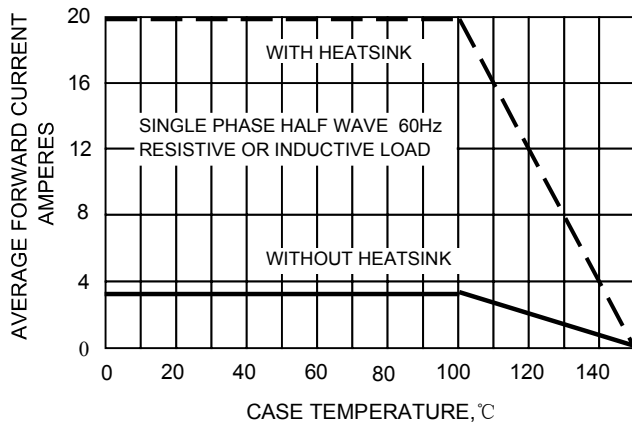
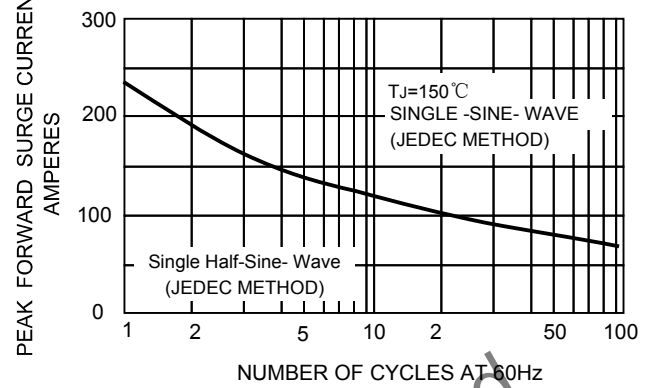
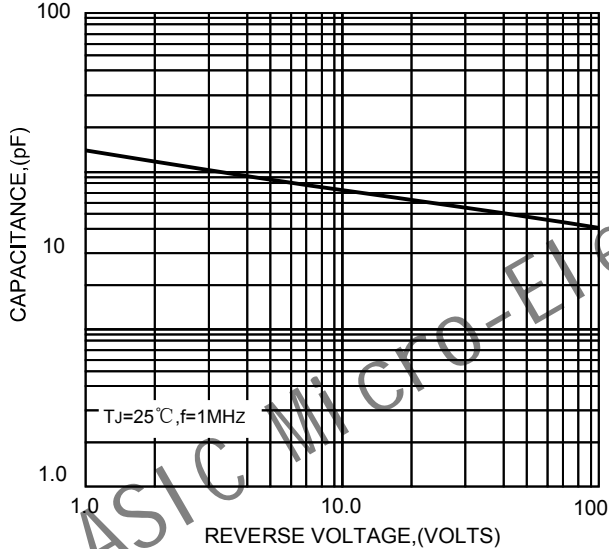
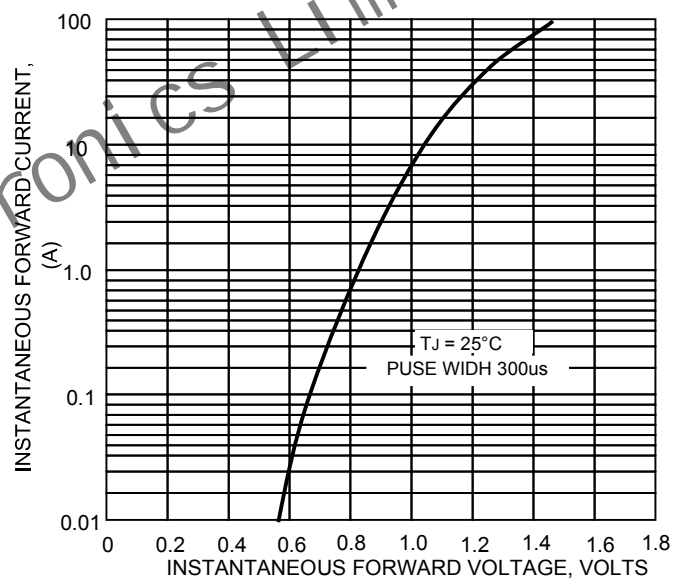
Rating at 25°C ambient temperature unless otherwise specified, Resistive or Inductive load, 60 Hz.
For Capacitive load derate current by 20%

CHARACTERISTICS	SYMBOL	ARDGBJ 20005KX0	ARDGBJ 2001KX0	ARDGBJ 2002KX0	ARDGBJ 2004KX0	ARDGBJ 2006KX0	ARDGBJ 2008KX0	ARDGBJ 2010KX0	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) Rectified Current @ T _C =100°C (without heatsink)	I <sub(av)< sub=""></sub(av)<>	20.0 3.5							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I _{FSM}	240							A
Maximum Forward Voltage at 10.0A 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
Typical Thermal Resistance (Note2)	R _{θJC}	1.5							°C/W
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)

FIG.1-FORWARD CURRENT DERATING CURVE

FIG.2-MAXMUN NON-REPETITIVE SURGE CURRENT

FIG.3-TYPICAL JUNCTION CAPACITANCE

FIG.4-TYPICAL FORWARD CHARACTERISTICS

FIG.5-TYPICAL REVERSE CHARACTERISTICS
