

UG2KB05 THRU UG2KB100

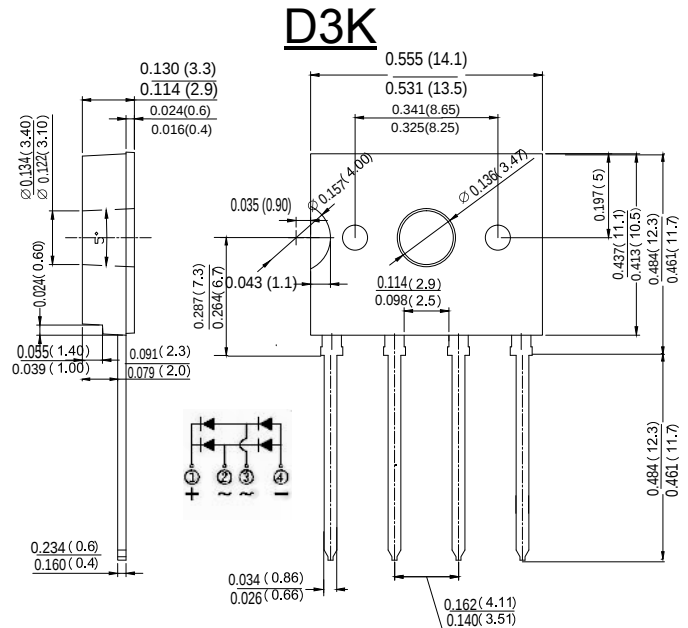
SINGLE PHASE 2.0AMP GLASS PASSIVATED BRIDGE RECTIFIER

Features

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Designed for surface mount application
- Plastic material-UL flammability 94V-0

Mechanical Data

- Case: D3K, molded plastic
- Terminal: Plated leads solderable per MIL-STD 202, Method 208
- Polarity: As Marked on case
- Mounting Position: Any
- Marking: Type Number
- Lead Free: For RoHS/Lead Free Version



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%.

TYPE NUMBER	SYMBOL	UG2K B05	UG2K B10	UG2K B20	UG2K B40	UG2K B60	UG2K B80	UG2K B100	UNIT
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
	V _{RWM}								
	V _{DC}								
RMS Reverse Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Average Rectified Output Current Without heat sink @T _C =90℃ With heat sink @T _C =90℃	I _{F(AV)}	1.0 2.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	60							A
I ² t Rating for Fusing (t < 8.3ms)	I ² t	14.94							A ² s
Forward Voltage per element @IF=2.0A	V _{FM}	1.1							V
Maximum DC reverse current at T _A =25℃ rated DC blocking voltage per leg T _A =125℃	I _R	5.0 500							uA
Typical Juntion Capacitance per leg (Note 1)	C _J	21							pF
Typical thermal resistance per leg	R _{θJA}	55							℃/W
	R _{θJL}	15							
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to +150							℃

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0VDC.

Fig. 1 Output Current Derating Curve

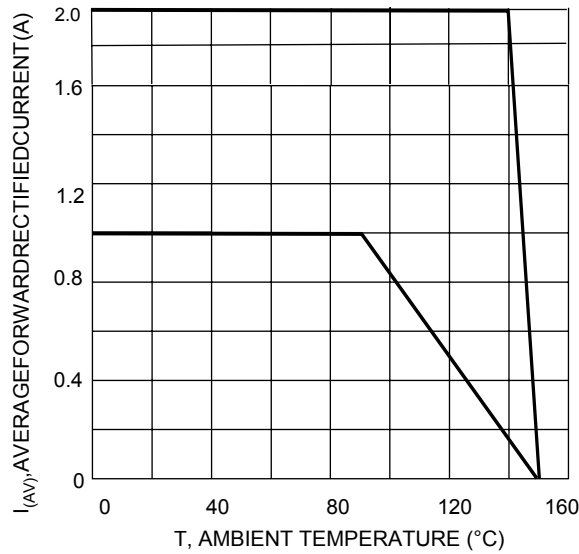


Fig. 2 Typical I Forward Characteristics (per leg)

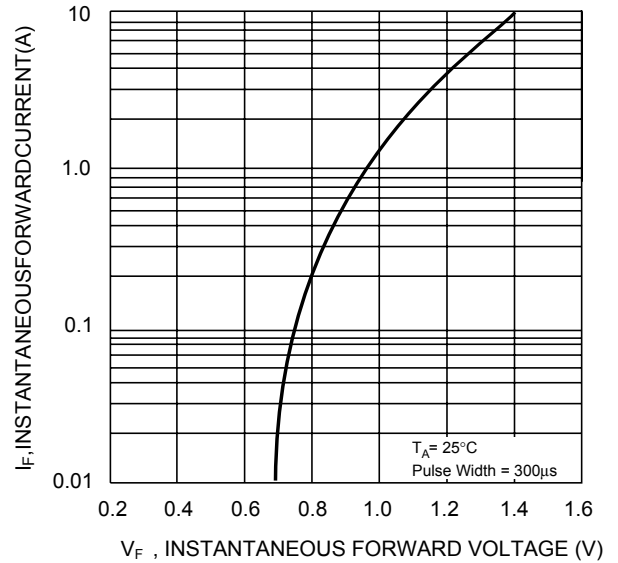


Fig. 3 Maximum Peak Forward Surge Current (per leg)

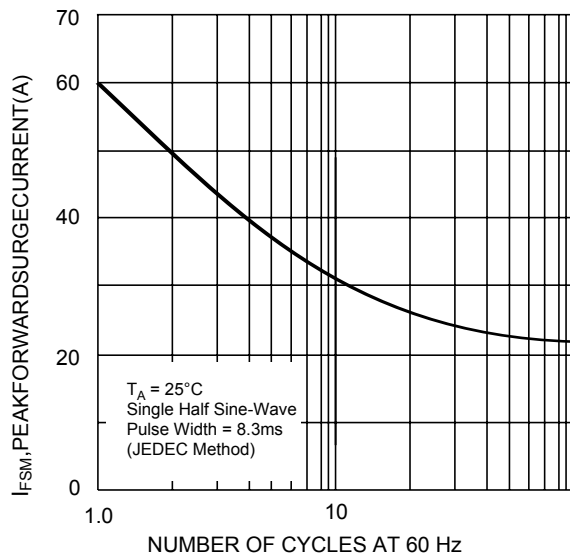


Fig.4 Typical Junction Capacitance Per Diode

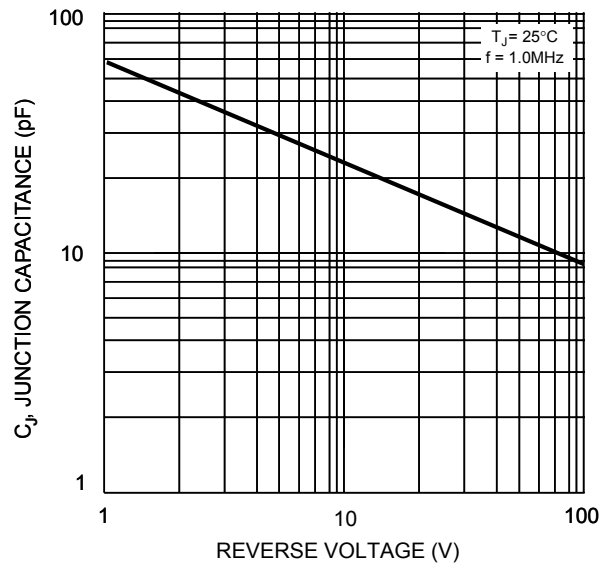
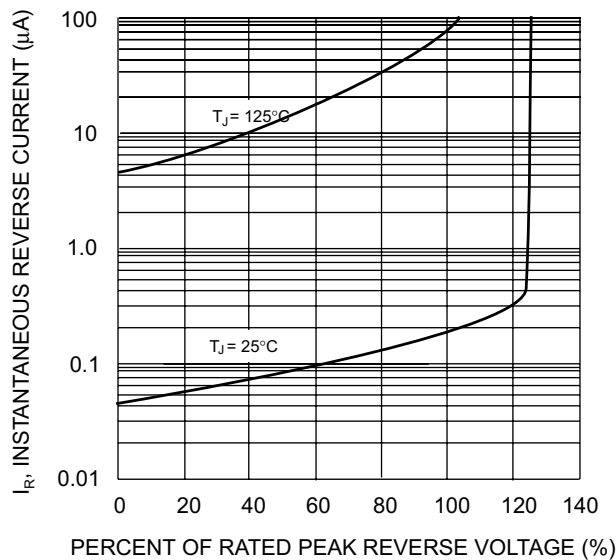


Fig. 5 Typical Reverse Characteristics (per element)



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