



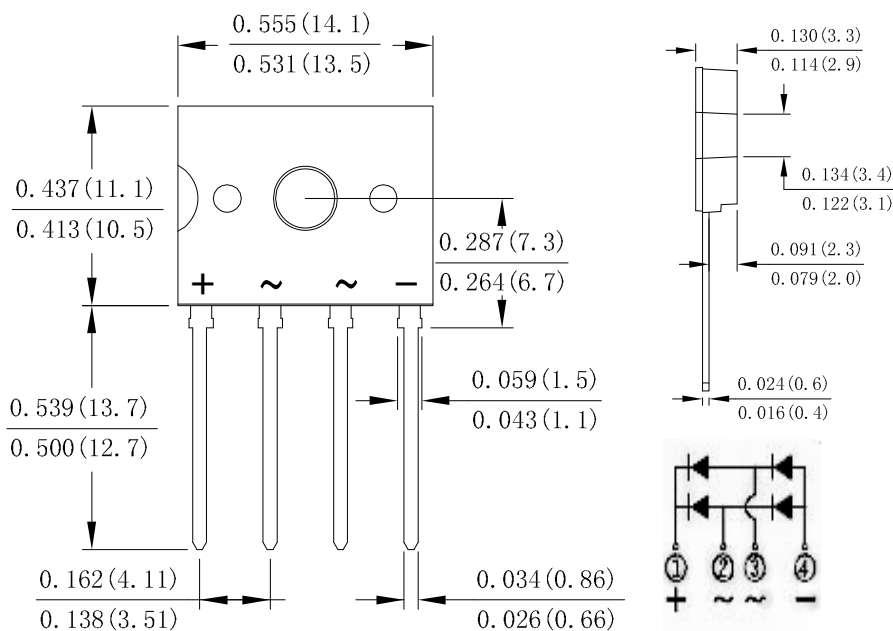
UG6KB05G THRU UG6KB100G

Single Phase 6.0AMP Glass Passivated Bridge Rectifier

Features

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

Case: D3K



Dimensions in inches and (millimeters)

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	UG6K B05G	UG6K B10G	UG6K B20G	UG6K B40G	UG6K B60G	UG6K B80G	UG6K B100G	UNIT	
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM}								V	
	V_{RWM}	50	100	200	400	600	800	1000		
	V_{DC}									
RMS Reverse Voltage	V_{RMS}	35	70	140	280	420	560	700	V	
Average Rectified Output Current	Without heat sink @ $T_c=90^\circ\text{C}$ With heat sink @ $T_c=90^\circ\text{C}$	IF(AV)				3.0 6.0				A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}					130				A
I^2t Rating for Fusing (t < 8.3ms)	I^2t					70.135				A ² s
Forward Voltage per element @IF=6.0A	V_{FM}					1.1				V
Maximum DC reverse current at $T_J=25^\circ\text{C}$ rated DC blocking voltage per leg $T_J=125^\circ\text{C}$	I_R					5.0 200				uA
Dielectric Strength	V_{ids}					2500				V
The proposed installation torque Max torque	T_{or}					5.0 8.0				Kgf.cm
Typical Junction Capacitance (Note1)	C_J					35				pF
Typical thermal resistance	$R_{\theta JA}$					55				°C/W
	$R_{\theta JL}$					15				
Operating and Storage Temperature Range	T_J, T_{STG}					-55 to +150				°C

Note:1. Measured at 1.0 MHZ and applied reverse voltage of 4.0VD.C.



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Fig. 1 Forward Current Derating Curve

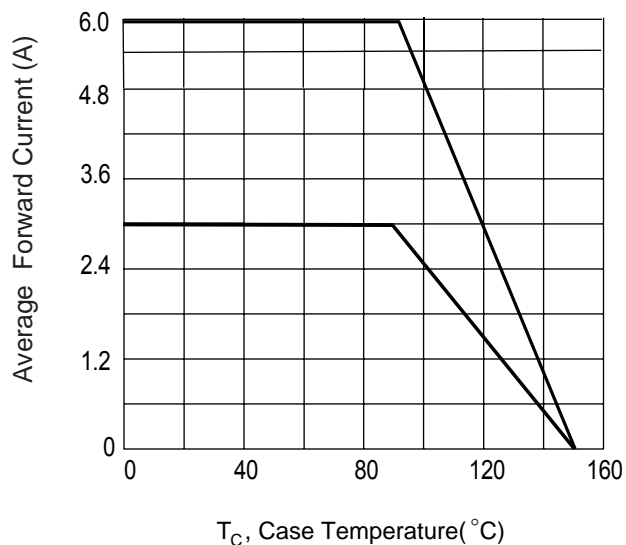


Fig. 2 Typ. Forward Characteristics

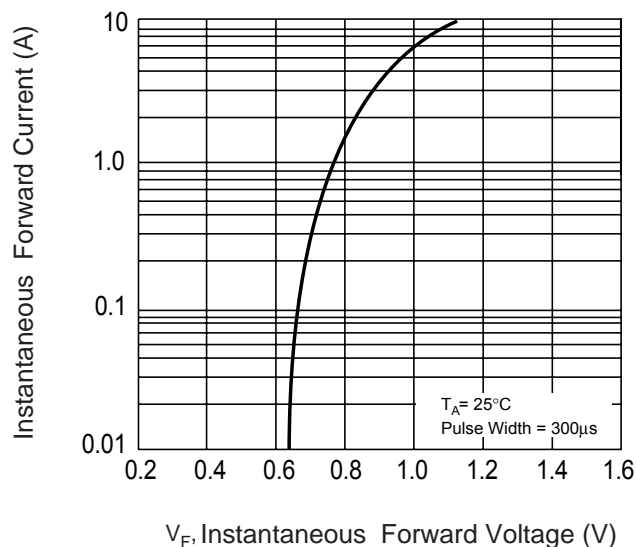


Fig.3 Maximum Peak Forward Surge Current

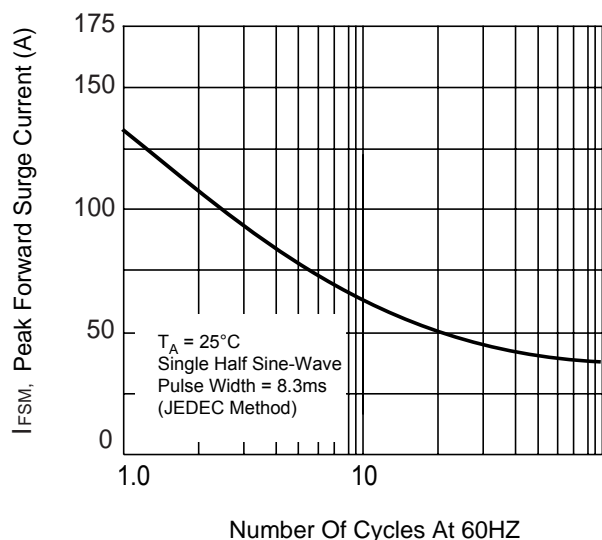


Fig. 4 Typical Junction Capacitance

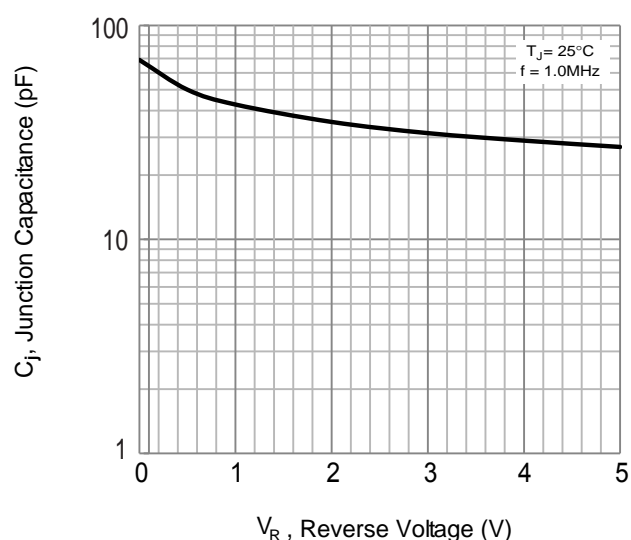
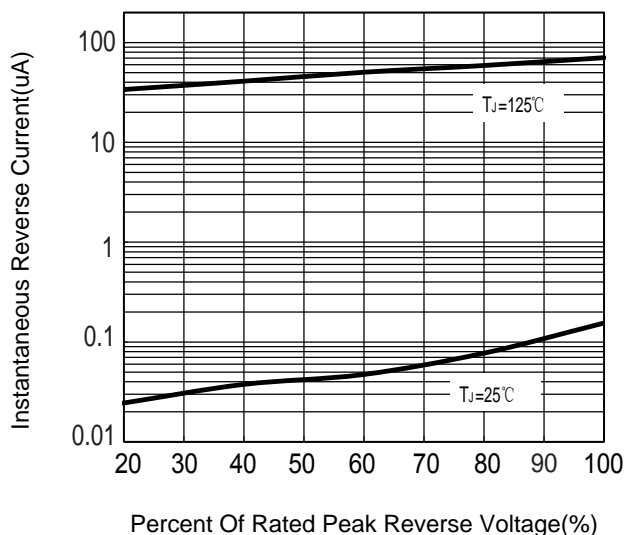


Fig.5 Typical Reverse Characteristics





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