UG4KB05 THRU UG4KB100

SINGLE PHASE4.0AMP GLASS PASSIVATED BRIDGE RECTIFIER

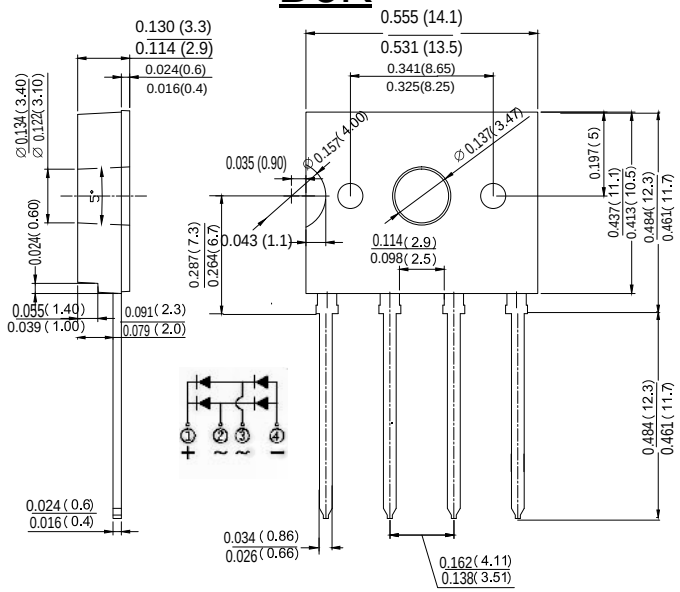
Features

- 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

D3K



Dimiensions in inches and （milimeters）

Maximum Ratings and Electrical Characteristics

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

TYPE NUMBER (NOTE2)	SYMBOL	UG4K B05	UG4K B10	UG4K B20	UG4K B40	UG4K B60	UG4K B80	UG4K B100	UNIT
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_{DC}	50	100	200	400	600	800	1000	V
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 ℃	IF(AV)	2.0 4.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	120							A
I^2t Rating for Fusing (t < 8.3ms)	I^2t	59.76							A^2s
Forward Voltage per element @IF=2.0A @IF=4.0A	V_{FM}	1.0 1.1							V
Maximum DC reverse current at T_J=25℃ rated DC blocking voltage per leg T_J=125℃	I_R	5.0 200							uA
Dielectric Strength	Vids	2500							V
The proposed installation torque Max torque	Tor	5.0 8.0							Kgf.cm
Typical Junction Capacitance (Note 1)	C_J	30							pF
Typical thermal resistance (Note 2)	$R_{\theta JA}$	45							℃/W
	$R_{\theta JL}$	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 4.0VD.C.
2. Mounted on glass epoxy PC board with 1.3mm ^{2} solder pad. For reference only

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Fig. 1 Output Current Derating Curve

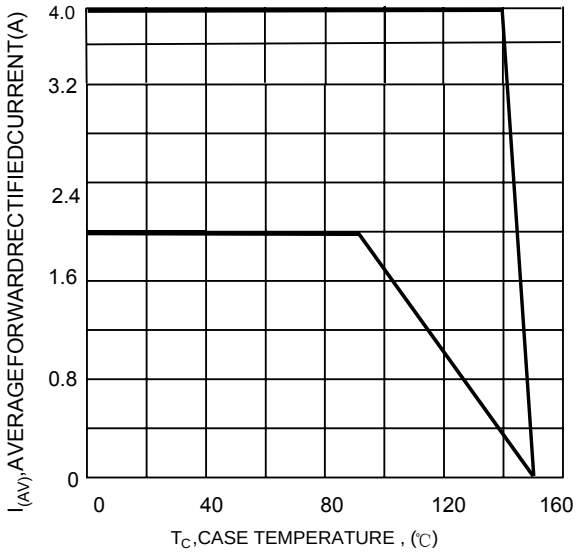


Fig. 2 Typical Forward Characteristics

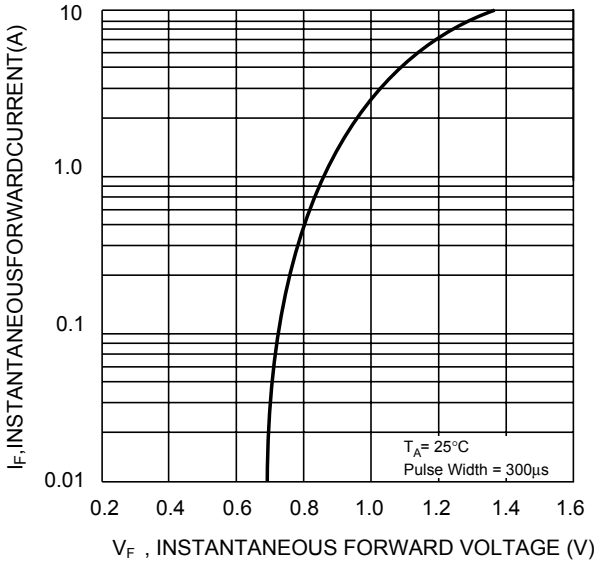


Fig. 3 Maximum Peak Forward Surge Current

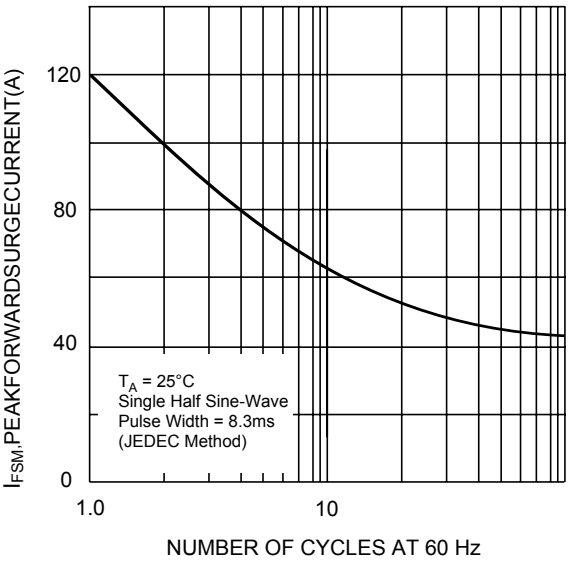


Fig.4 Typical Junction Capacitance Per Diode

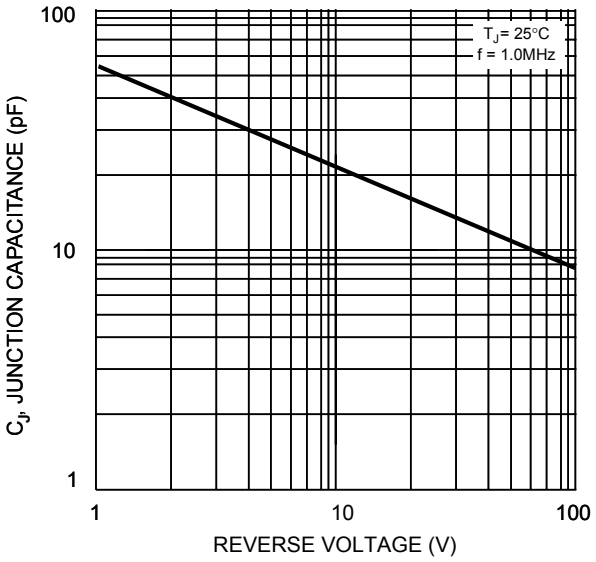
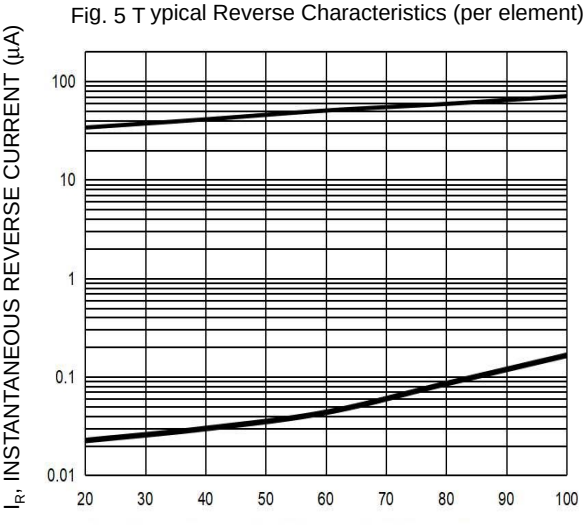


Fig. 5 T ypical Reverse Characteristics (per element)



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