BORN SEMICONDUCTOR

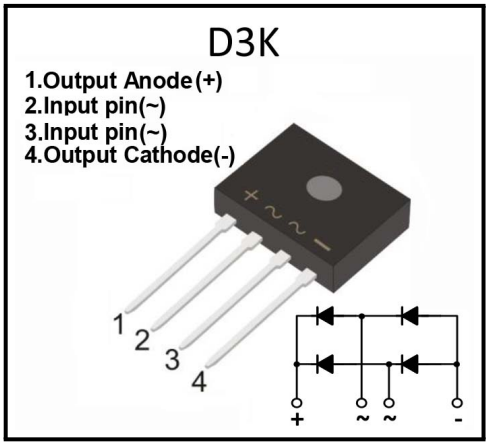
UG6KB05–UG6KB100/G

Single Phase 6.0Amp Glass passivated Bridge Rectifiers

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Idea for printed circuit board
- Glass passivated Junction chip
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed 250 °C/10 seconds at terminals
- The G suffix is uses for photoresist chip, otherwise it is a knife scraping chip

Mechanical Data



Description

- Case : Molded plastic body
- Terminals : Solder plated, solderable per MIL-STD-750,Method 2026
- Polarity : Polarity symbol marking on body
- Mounting Position : Any

Maximum Ratings And Electrical Characteristics (@T_A=25°C unless otherwise noted)

Symbol	Parameter	UG6K B05	UG6K B10	UG6K B20	UG6K B40	UG6K B60	UG6K B80	UG6K B100	Unit
V_{RRM}	Maximum repetitive peak reverse voltage	50	100	200	400	600	800	1000	V
V_{RMS}	Maximum RMS voltage	35	70	140	280	420	560	700	V
V_{DC}	Maximum DC blocking voltage	50	100	200	400	600	800	1000	V
I_{AV}	Maximum average forward rectified current with heatsink	6.0							A
I_{FSM}	Peak forward surge current, 8.3ms single half sine-wave	150.0							A
I_t^2	Rating for fusing (t=8.3ms, T_A=25°C)	93.38							A_S^2
V_F	Maximum forward voltage at 6.0A	1.10							V
I_R	Maximum DC reverse current@T_A=25°C	5.0							uA
	at rated DC blocking voltage @T_A=125°C	500							
C_J	Typical junction capacitance (Note 1)	56.0							pF
R_{qJA}	Typical thermal resistance	55.0							°C/W
T_J T_{STG}	Operating junction ,storage temperature range	-55 to +150							°C

Note:(1)Measured at 1MHz and applied reverse voltage of 4.0V D.C.

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Revision: 2022-Jan-1

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Ratings And Characteristic Curves

Figure 1:DERATING CURVE OUTPUT RECTIFIED CURRENT

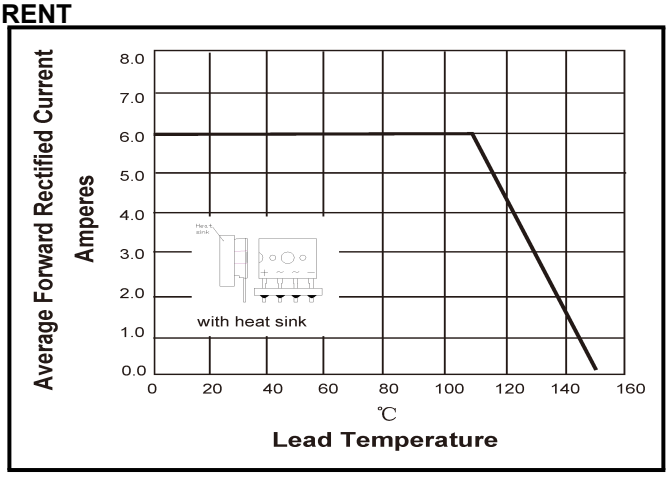


Figure 2:MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

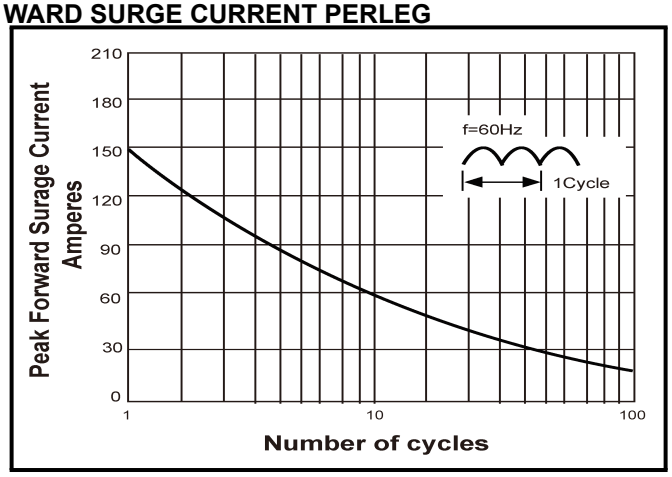


Figure 3:YPICAL FORWARD VOLTAGE CHARACTERISTICS

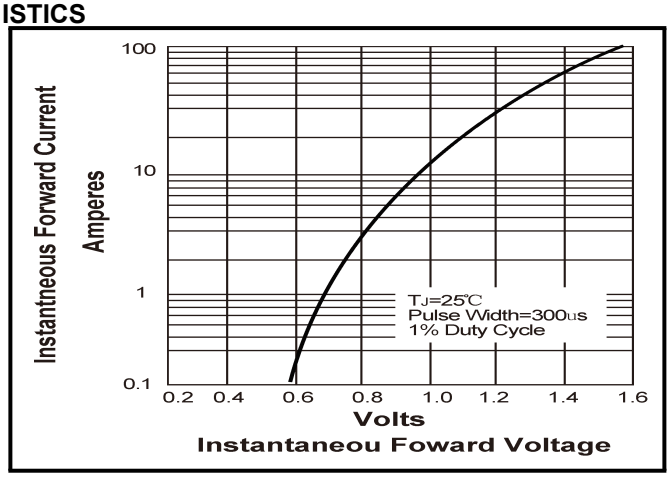
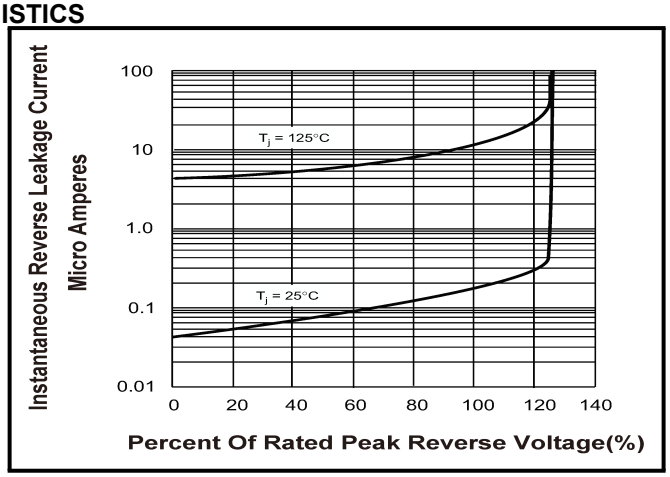


Figure 4:TYPICAL REVERSE LEAKAGE CHARACTERISTICS



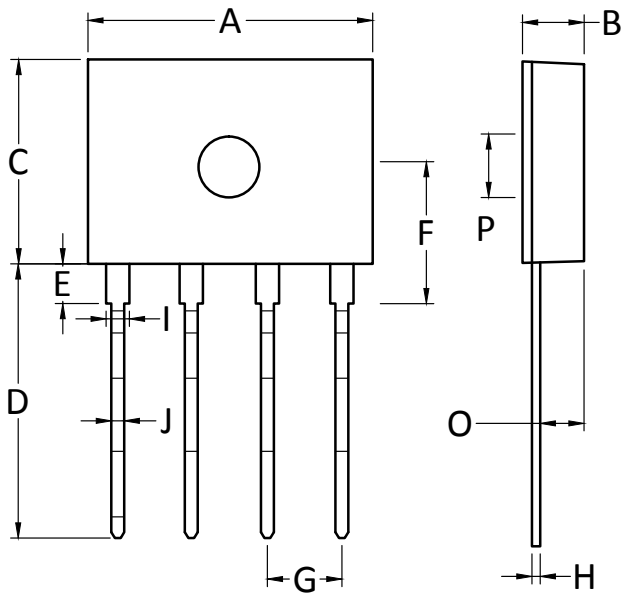
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Outline Drawing –D3K



SYMBOL	MILLIMETER	
	MIN.	MAX.
A	14.2	14.7
B	3.30	3.60
C	10.2	10.6
D	13.8	14.4
E	1.8	2.2
F	6.65	7.25
G	3.71	3.91
H	0.3	0.55
I	1.22	1.42
J	0.76	0.86
O	1.8	2.4
P	3.0Φ	3.4Φ

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