

## Glass Passivated Bridge Rectifier

**Voltage** 1000 V **Current** 3A

### Features



- Ideal for printed circuit boards
- Lead free in compliance with EU RoHS 2.0
- Halogen-free according to IEC 61249 standard

### Mechanical Data

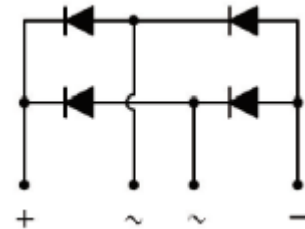
- Case : DXK Package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.0455 ounces, 1.29 grams

### Application

- USB PD & NB Adapter(<65W)
- Monitor power adapter (<100W)
- Consumer Power (<150W)
- Quick Charger (>45W)

Key Parameters	
Parameter	Value
$V_{RRM}$	1000V
$I_F(AV)$	3A
$I_{FSM}$	90A
$I_R$	5uA
Package	DXK

## DXK



**Maximum Ratings and Thermal Characteristics** ( $T_A = 25\text{ }^{\circ}\text{C}$  unless otherwise noted)

PARAMETER		SYMBOL	LIMIT	UNITS
Maximum Repetitive Peak Reverse Voltage		$V_{RRM}$	1000	V
Maximum RMS Voltage		$V_{RMS}$	700	V
Maximum DC Blocking Voltage		$V_{DC}$	1000	V
Maximum Average Forward Current	With heatsink	$I_{F(AV)}$	3	A
	Without heatsink		1.9	
Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load	@ $T_A = 25\text{ }^{\circ}\text{C}$	$I_{FSM}$	90	A
	@ $T_A = 125\text{ }^{\circ}\text{C}$		72	
Peak Forward Surge Current : 1.0 ms Single Half Square -Wave Superimposed On Rated Load	@ $T_A = 25\text{ }^{\circ}\text{C}$	$I_{FSM}$	170	A
	@ $T_A = 125\text{ }^{\circ}\text{C}$		128	
$I^2 t$ rating for fusing ( $t = 8.3\text{ms}$ )		$I^2 t$	33.6	$\text{A}^2\text{S}$
Typical Junction Capacitance Measured at 1 MHZ And Applied $V_R = 4\text{ V}$		$C_J$	28	pF
Typical Thermal Resistance (Note 1) (with heatsink)		$R_{\theta JA}$	17	$^{\circ}\text{C/W}$
		$R_{\theta JL}$	8	
		$R_{\theta JC}$	7	
Operating junction and storage temperature range		$T_J, T_{STG}$	-55~150	$^{\circ}\text{C}$
Mounting torque @ Recommend torque:5Kg.cm		Tor	8	Kg.cm

**Electrical Characteristics** ( $T_A = 25\text{ }^{\circ}\text{C}$  unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Forward Voltage	$V_F$	$I_F = 1.5\text{ A}, T_J = 25\text{ }^{\circ}\text{C}$	-	-	1.05	V
Reverse Current	$I_R$	$V_R = 1000\text{ V}, T_J = 25\text{ }^{\circ}\text{C}$	-	-	5	uA
		$V_R = 1000\text{ V}, T_J = 125\text{ }^{\circ}\text{C}$	-	-	100	

NOTES :

1. Device mounted on 10 cm \* 9.4 cm \* 2.6 cm Fin type heat sink

TYPICAL CHARACTERISTIC CURVES

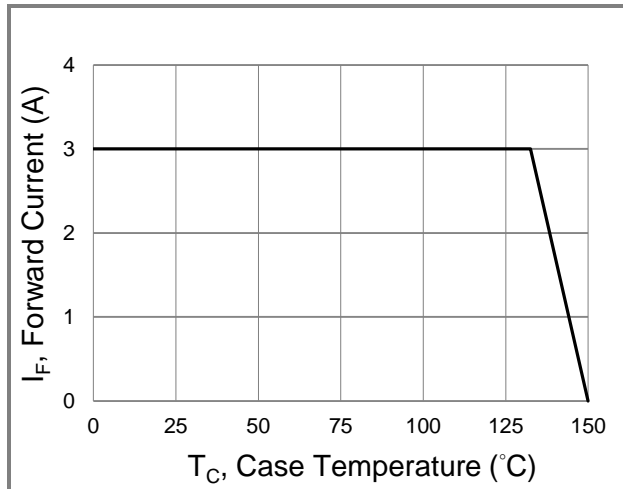


Fig.1 Forward Current Derating Curve

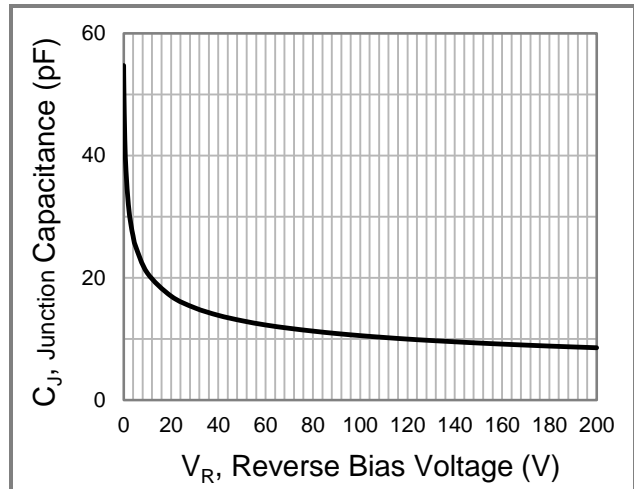


Fig.2 Typical Junction Capacitance

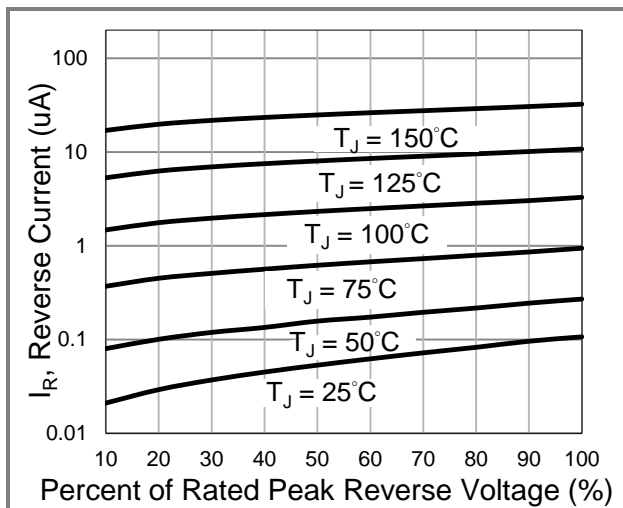


Fig.3 Typical Reverse Characteristics

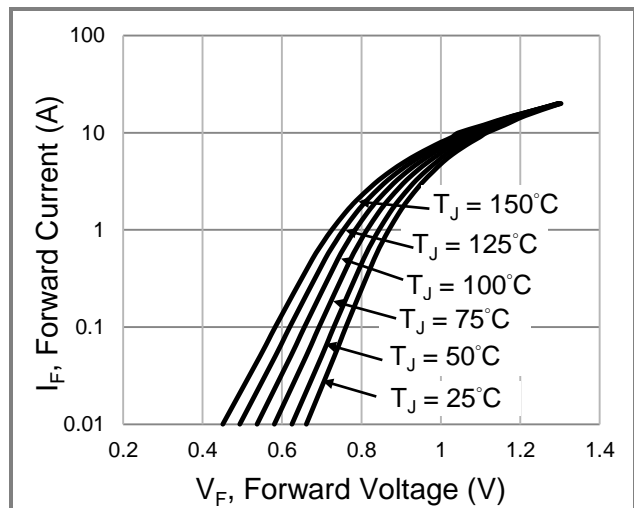


Fig.4 Typical Forward Characteristics

**Part No. Marking Code Version**

Approved Part No.	Package Type	Packing Type	Marking
DXK310	DXK	35pcs / Tube	DXK310

**Packaging Information**

DXK Dimension

Unit: inch(mm)

The image shows a technical drawing of the DXK component. The top view is a square with a central circular feature. Dimensions A, B, C, D, E, F, G, H, and I are labeled. The side view shows the component's profile with dimensions J, K, and L. The component has a central circular feature with a crosshair, and four leads extending from the bottom. The leads are labeled D, E, F, and G. The side view shows the component's profile with dimensions J, K, and L. The component is shown in a perspective view.

DXK Dimension.Unit: Inch(mm)				
Dim	Unit (Inch)		Unit (mm)	
	Min	Max	Min	Max
A	0.559	0.579	14.20	14.70
B	0.398	0.421	10.10	10.70
C	0.543	0.567	13.80	14.40
D	0.146	0.154	3.71	3.91
E	0.262	0.285	6.65	7.25
F	0.070	0.090	1.80	2.20
G	0.043	0.059	1.10	1.50
H	0.026	0.034	0.66	0.86
I	0.114	0.130	2.90	3.30
J	ø0.122	ø0.130	ø3.10	ø3.30
K	0.071	0.095	1.80	2.40
L	0.016	0.024	0.40	0.60

## Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.
- Since Panjit uses lot number as the tracking base, please provide the lot number for tracking when complaining.