

## Glass Passivated Bridge Rectifier

**Voltage**

**1000 V**

**Current**

**6A**

### Features



- Ideal for printed circuit boards
- UL recognition file number E526209
- Lead free in compliance with EU RoHS 2.0
- Halogen-free according to IEC 61249 standard

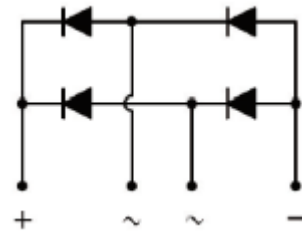
### Mechanical Data

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

### Application

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

## DXK



Key Parameters	
Parameter	Value
$V_{RRM}$	<b>1000V</b>
$I_F(AV)$	<b>6A</b>
$I_{FSM}$	<b>150A</b>
$I_R$	<b>5uA</b>
<b>Package</b>	<b>DXK</b>

**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	$I_{F(AV)}$	6	A
	Without heatsink		1.9	
Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load	@ $T_A = 25\text{ }^{\circ}\text{C}$	$I_{FSM}$	150	A
	@ $T_A = 125\text{ }^{\circ}\text{C}$		120	
Peak Forward Surge Current : 1.0 ms Single Half Square -Wave Superimposed On Rated Load	@ $T_A = 25\text{ }^{\circ}\text{C}$	$I_{FSM}$	230	A
	@ $T_A = 125\text{ }^{\circ}\text{C}$		190	
$I^2 t$ rating for fusing ( $t = 8.3\text{ms}$ )		$I^2 t$	93.37	$\text{A}^2\text{S}$
Typical Junction Capacitance Measured at 1 MHZ And Applied $V_R = 4\text{ V}$		$C_J$	42	pF
Typical Thermal Resistance (Note 1) (with heatsink)		$R_{\theta JA}$	20	$^{\circ}\text{C/W}$
		$R_{\theta JL}$	12	
		$R_{\theta JC}$	9	
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	$V_F$	$I_F = 3\text{ A}, T_J = 25\text{ }^{\circ}\text{C}$	-	-	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

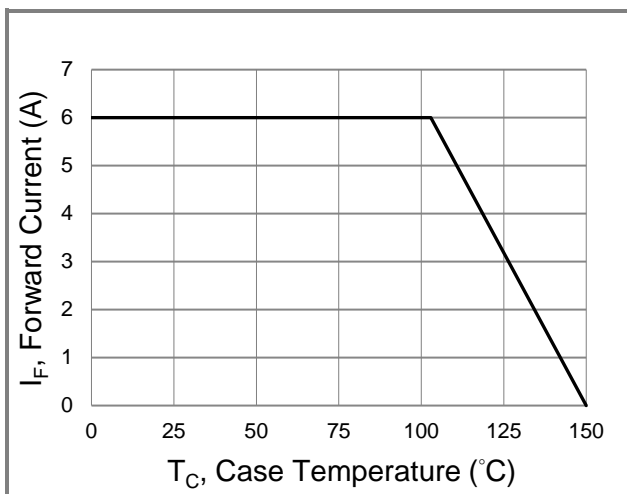


Fig.1 Forward Current Derating Curve

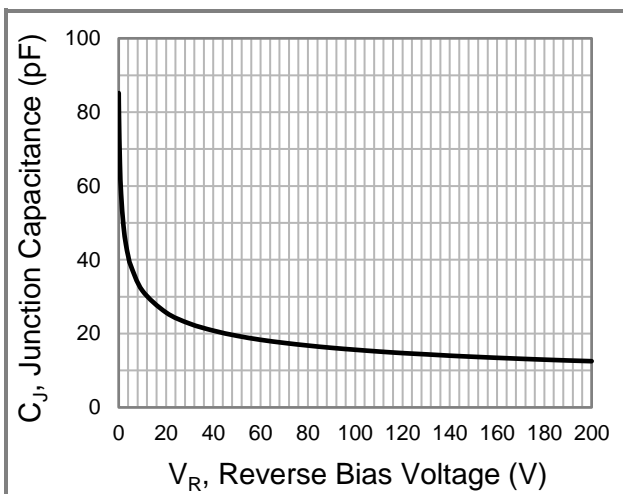


Fig.2 Typical Junction Capacitance

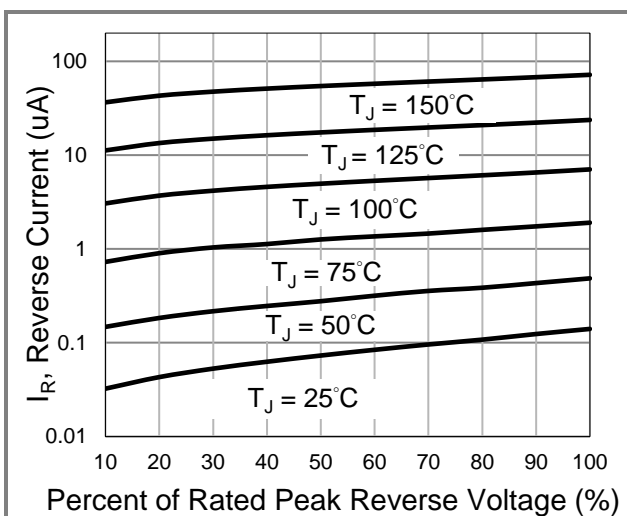


Fig.3 Typical Reverse Characteristics

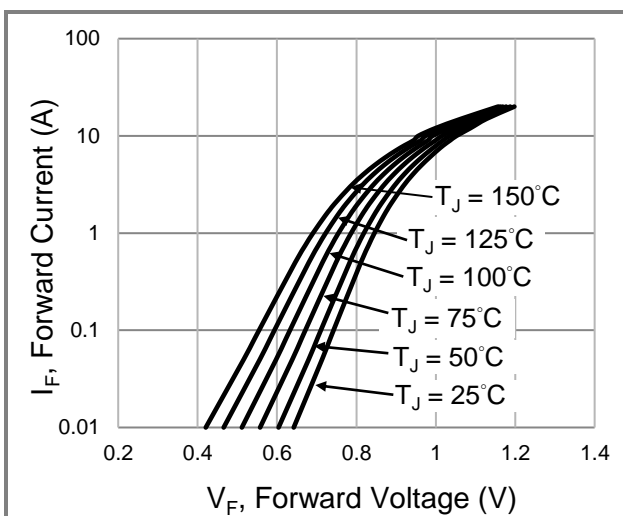


Fig.4 Typical Forward Characteristics

## Product and Packing Information

Part No.	Package Type	Packing Type	Marking
DXK610	DXK	35pcs / Tube	DXK610

## Packaging Information

DXK Dimension

Unit: inch(mm)

Technical drawing of the DXK package showing top and side views with dimensions A through L. The top view shows a square body with a central circular feature and four pins. The side view shows the profile of the package with dimensions I, J, K, and L.

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	0.13	2.90	3.30
J	Ø0.122	Ø0.130	Ø3.10	Ø3.30
K	0.071	0.095	1.80	2.40
L	0.014	0.024	0.35	0.60

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