

Glass Passivated Bridge Rectifier

Voltage

1000 V

Current

6A

Features



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

Mechanical Data

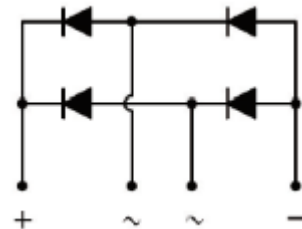
- Case : DXK Package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.0455 ounces, 1.29 grams

Application

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

Key Parameters	
Parameter	Value
V_{RRM}	1000V
$I_F(AV)$	6A
I_{FSM}	150A
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	$I_{F(AV)}$	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	A^2S
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

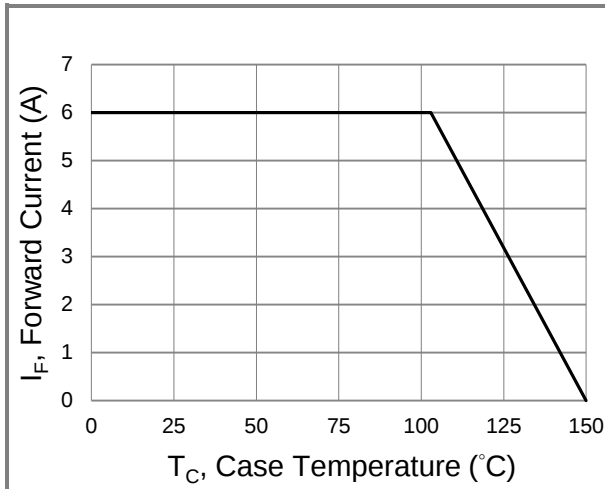


Fig.1 Forward Current Derating Curve

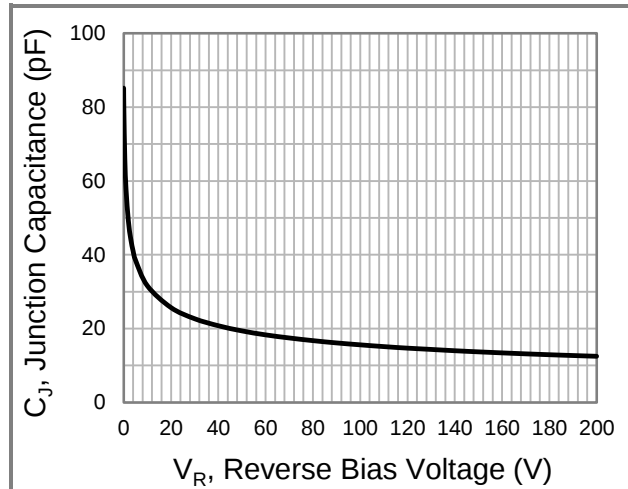


Fig.2 Typical Junction Capacitance

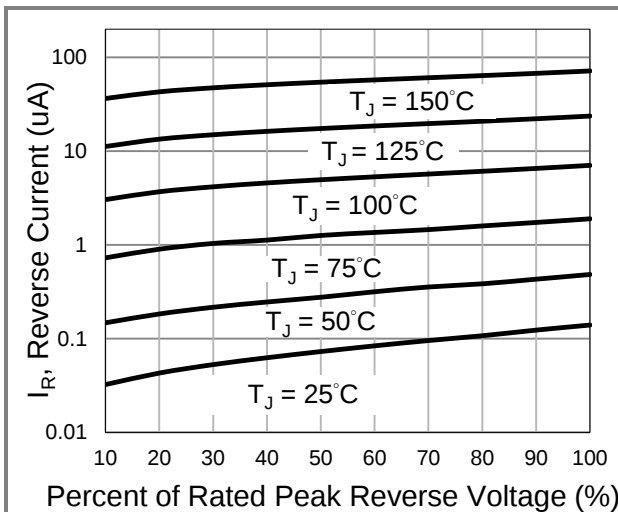


Fig.3 Typical Reverse Characteristics

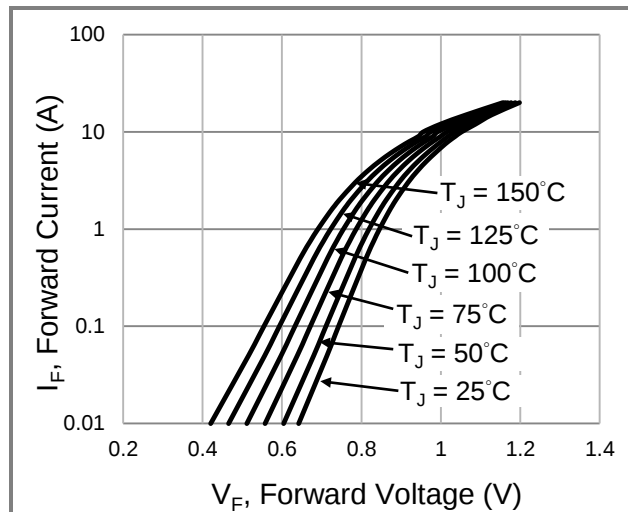


Fig.4 Typical Forward Characteristics

Part No. Marking Code Version

Approved 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	0.130	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

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