Glass Passivated Fast Recovery Bridge Rectifier

Voltage	1000 V	Current	8A

DXK

Features

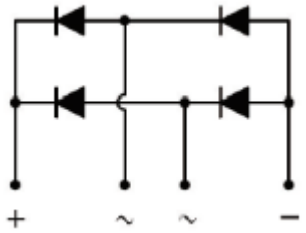
- Ideal for printed circuit boards
- Fast reverse recovery time
- Lead free in compliance with EU RoHS 2.0
- Halogen-free according to IEC 61249 standard

Mechanical Data

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

Application

- USB PD & NB Adapter
- Monitor power adapter
- Consumer Power
- Quick Charger



Key Parameters	
Parameter	**Value**
V_{RRM}	1000V
$I_F(AV)$	8A
I_{FSM}	150A
I_R	5uA
T_{rr}	250ns
Package	DXK

Maximum Ratings and Thermal Characteristics (T_A = 25 °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	$I_{F(AV)}$	8	A
	Without heatsink		1.9	
Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load	@ T_A = 25 °C	I_{FSM}	150	A
	@ T_A = 125 °C		120	
Peak Forward Surge Current : 1.0 ms Single Half Square -Wave Superimposed On Rated Load	@ T_A = 25 °C	I_{FSM}	300	A
	@ T_A = 125 °C		230	
I^2t rating for fusing (t = 8.3ms)		I^2t	93	A^2S
Typical Junction Capacitance Measured at 1 MHZ And Applied V_R = 4 V		C_J	50	pF
Maximum Reverse Recovery Time (Note 2)		Trr	250	ns
Typical Thermal Resistance (Note 1) (with heatsink)		$R_{\theta JA}$	12	°C/W
		$R_{\theta JL}$	8	
		$R_{\theta Jc}$	4	
Operating junction and storage temperature range		T_J, T_{STG}	-55~150	°C
Mounting torque @ Recommend torque:5Kg.cm		Tor	8	Kg.cm

Electrical Characteristics (T_A = 25 °C unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Forward Voltage	V_F	I_F = 4 A, T_J = 25 °C	-	-	1.3	V
Reverse Current	I_R	V_R = 1000 V, T_J = 25 °C	-	-	5	uA
		V_R = 1000 V,T_J= 125 °C	-	-	100	

NOTES :

1. Device mounted on 10 cm * 9.4 cm * 2.6 cm Fin type heat sink.
2. Measured with IF = 0.5 A, IR= 1 A, IRR = 0.25 A.

TYPICAL CHARACTERISTIC CURVES

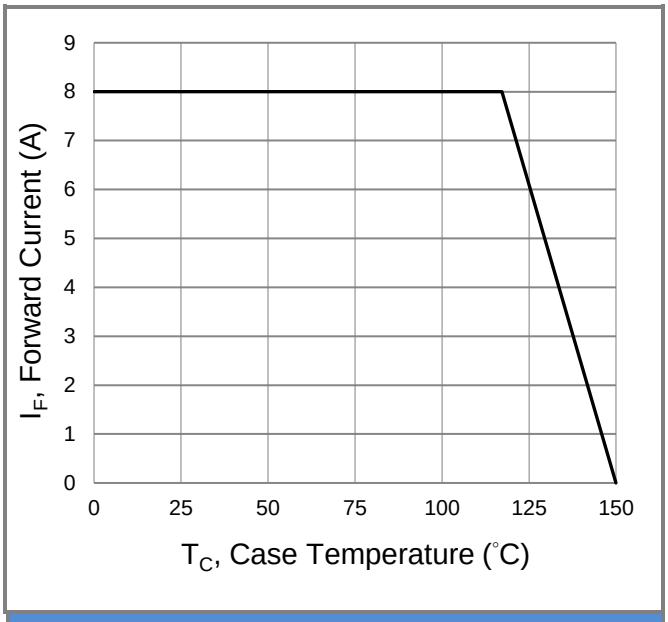


Fig.1 Forward Current Derating Curve

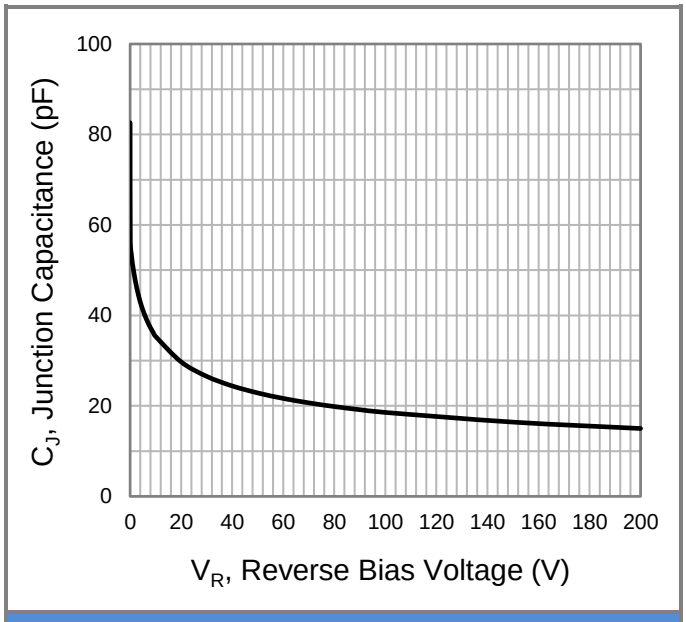


Fig.2 Typical Junction Capacitance

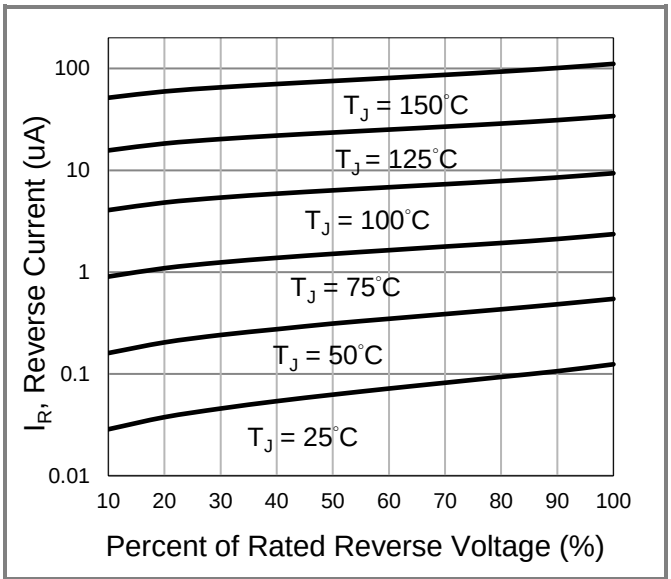


Fig.3 Typical Reverse Characteristics

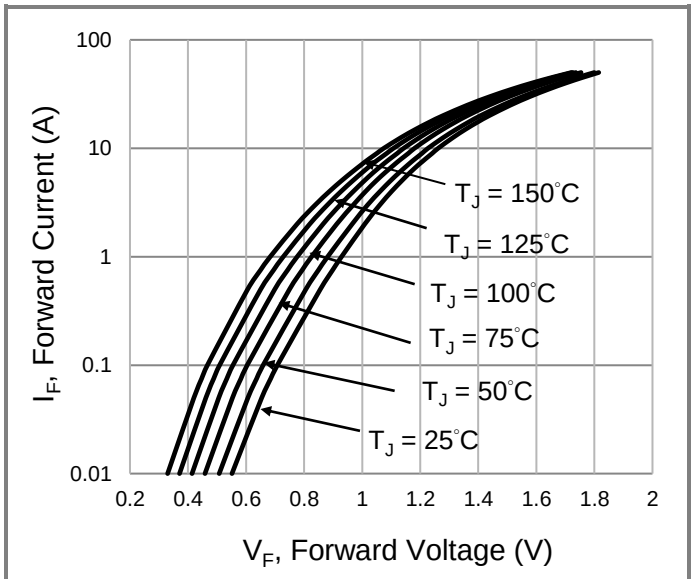


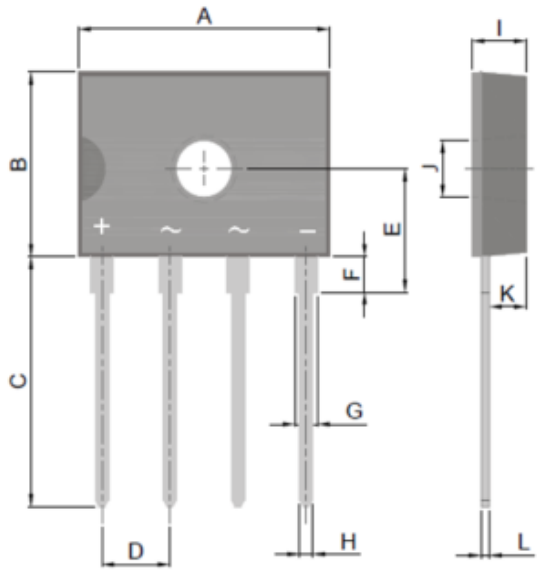
Fig.4 Typical Forward Characteristics

Product and Packing Information

Part No.	Package Type	Packing Type	Marking
RDXK810	DXK	35pcs / Tube	RDXK810

Packaging Information

DXK Dimension — Unit: inch(mm)



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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