

Glass Passivated Fast Recovery Bridge Rectifier

Voltage

1000 V

Current

4A

Features



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

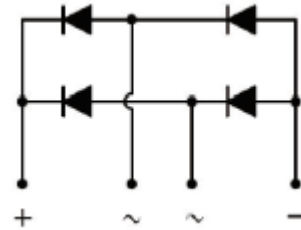
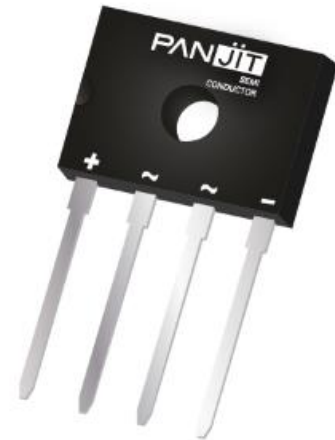
Mechanical Data

- 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

DXK



Key Parameters	
Parameter	Value
V_{RRM}	1000V
$I_F(AV)$	4A
I_{FSM}	120A
I_R	5uA
T_{rr}	250ns
Package	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	$I_{F(AV)}$	4	A
	Without heatsink		1.8	
Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load	@ $T_A = 25\text{ }^\circ\text{C}$	I_{FSM}	120	A
	@ $T_A = 125\text{ }^\circ\text{C}$		96	
Peak Forward Surge Current : 1.0 ms Single Half Square -Wave Superimposed On Rated Load	@ $T_A = 25\text{ }^\circ\text{C}$	I_{FSM}	240	A
	@ $T_A = 125\text{ }^\circ\text{C}$		192	
$I^2 t$ rating for fusing ($t = 8.3\text{ms}$)		$I^2 t$	60	A^2S
Typical Junction Capacitance Measured at 1 MHz And Applied $V_R = 4\text{ V}$		C_J	40	pF
Maximum Reverse Recovery Time (Note 2)		T_{rr}	250	ns
Typical Thermal Resistance (Note 1) (with heatsink)		$R_{\theta JA}$	15	$^\circ\text{C/W}$
		$R_{\theta JL}$	8	
		$R_{\theta Jc}$	4	
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	$I_F = 2\text{ A}, T_J = 25\text{ }^\circ\text{C}$	-	-	1.3	V
Reverse Current	I_R	$V_R = 1000\text{ V}, T_J = 25\text{ }^\circ\text{C}$	-	-	5	μA
		$V_R = 1000\text{ V}, T_J = 125\text{ }^\circ\text{C}$	-	-	100	

NOTES :

1. Device mounted on 10 cm * 9.4 cm * 2.6 cm Fin type heat sink.
2. Measured with $I_F = 0.5\text{ A}, I_R = 1\text{ A}, I_{RR} = 0.25\text{ A}$.

TYPICAL CHARACTERISTIC CURVES

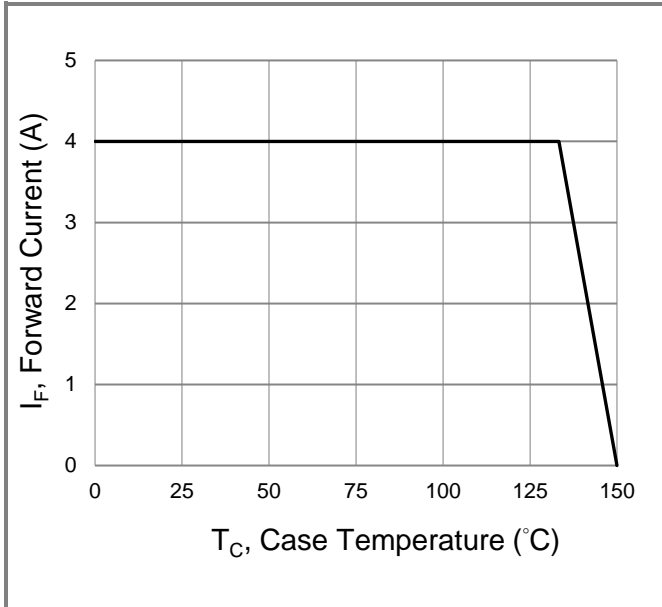


Fig.1 Forward Current Derating Curve

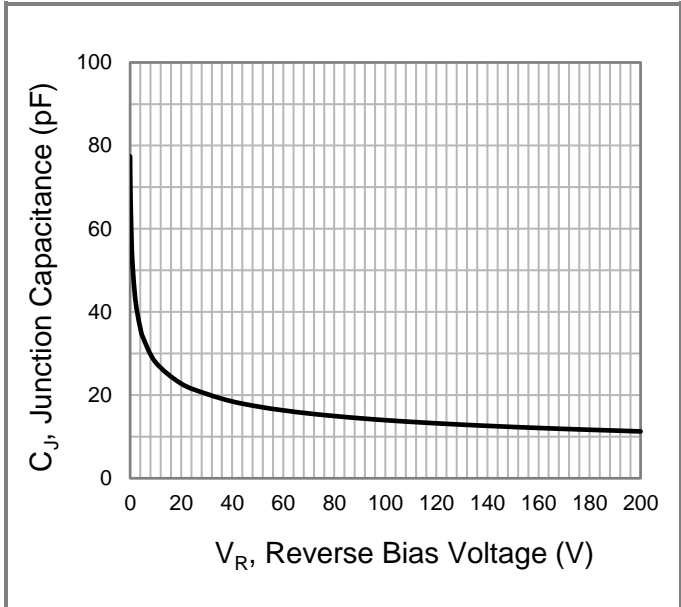


Fig.2 Typical Junction Capacitance

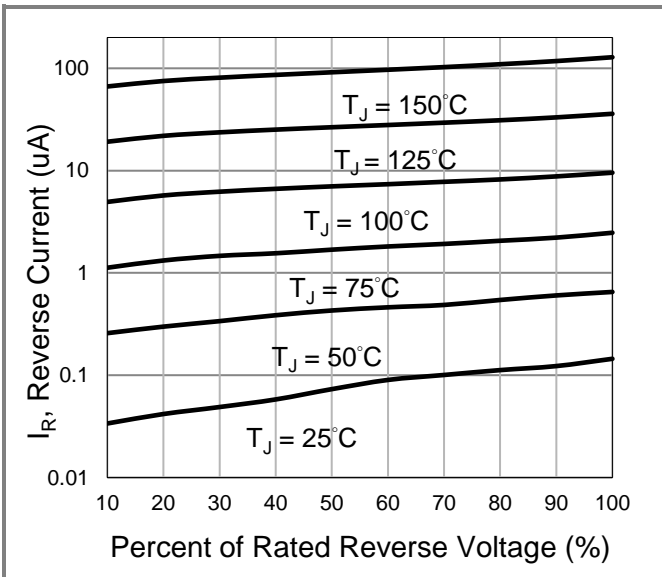


Fig.3 Typical Reverse Characteristics

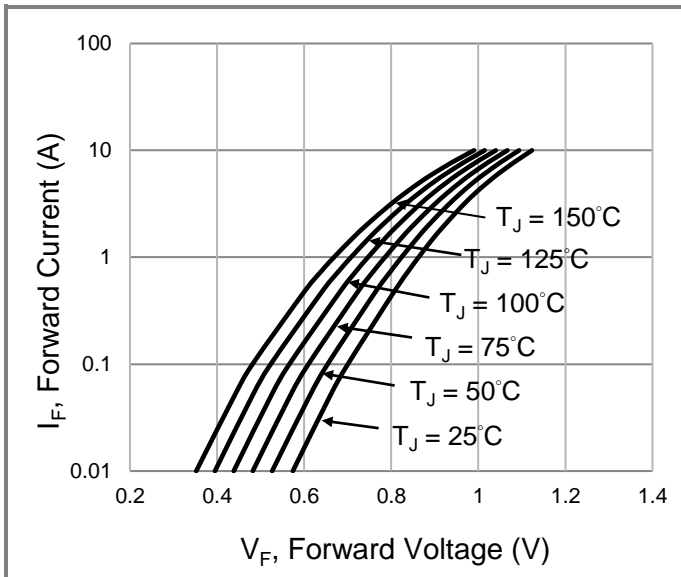
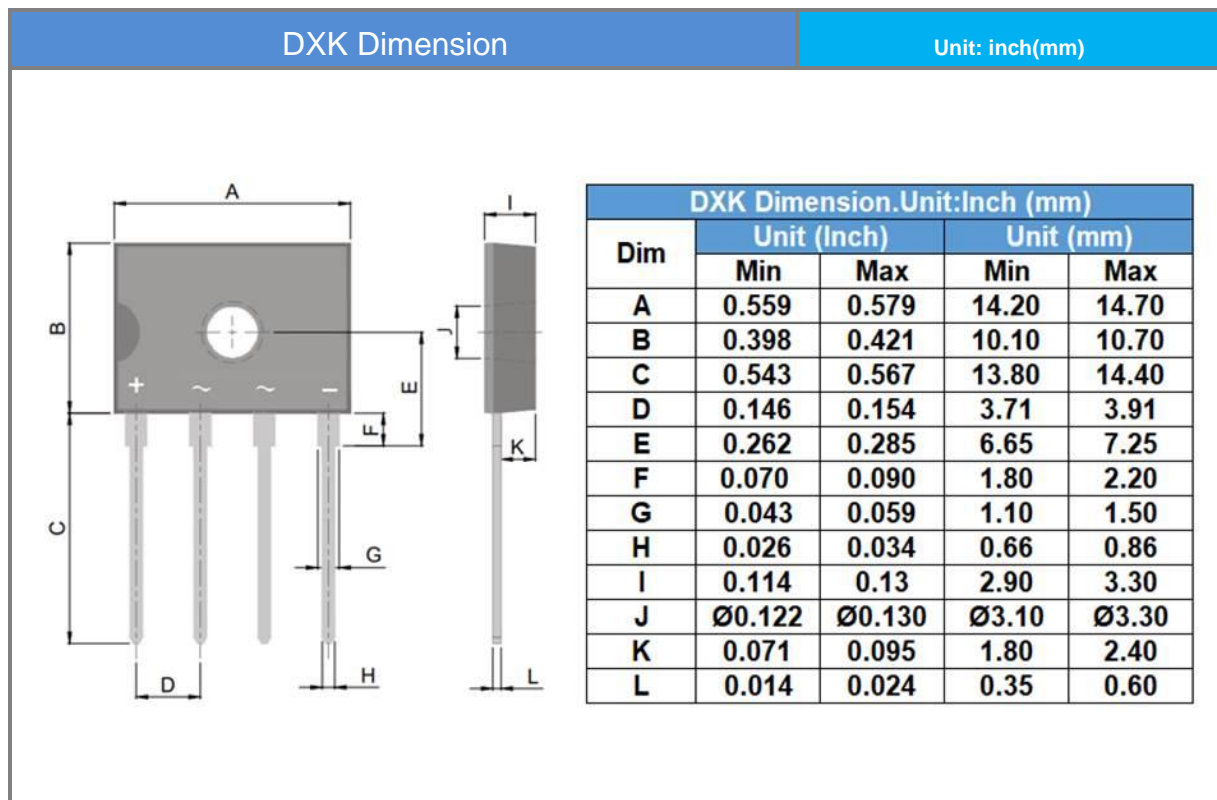


Fig.4 Typical Forward Characteristics

Product and Packing Information

Part No.	Package Type	Packing Type	Marking
RDXK410	DXK	35pcs / Tube	RDXK410

Packaging Information



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